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W05101

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Rec 3/19/07

Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Data Package Contains _____ Pages

Report Nbr: 34659

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05101	S07-001	B1LP43	J7A230268-1	JM8241AA	9JM82410	7031404
		B1LP43	J7A230268-1	JM8241AC	9JM82410	7031399
		B1LP34	J7A230268-2	JM8281AA	9JM82810	7031455
		B1LP34	J7A230268-2	JM8281AC	9JM82810	7031450
		B1LP34	J7A230268-2	JM8281AD	9JM82810	7031398
		B1LP34	J7A230268-2	JM8281AE	9JM82810	7031458
		B1LP34	J7A230268-2	JM8281AF	9JM82810	7031399
		B1LC45	J7A230278-1	JM83H1AA	9JM83H10	7031450
	S07-012	B1LD58	J7A250121-1	JNCXW1AA	9JNCXW10	7031399
		B1LD58	J7A250121-1	JNCXW1AD	9JNCXW10	7031396
		B1LD58	J7A250121-1	JNCXW2AC	9JNCXW20	7046186
		B1LD63	J7A250121-2	JNCX11AA	9JNCX110	7031396
S07-001	B1LPC9	J7A250129-1	JNC0N1AA	9JNC0N10	7031404	
		J7A250129-1	JNC0N1AC	9JNC0N10	7031465	
		J7A250129-1	JNC0N1AE	9JNC0N10	7031455	

Comments:

Report Nbr: 34659

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05101	S07-001	B1LPC9	J7A250129-1	JNC0N1AF	9JNC0N10	7031450
		B1LPC9	J7A250129-1	JNC0N1AG	9JNC0N10	7031458
		B1LPC9	J7A250129-1	JNC0N2AD	9JNC0N20	7053500
		B1LPB1	J7A250129-2	JNC021AA	9JNC0210	7031404
		B1LPB1	J7A250129-2	JNC021AC	9JNC0210	7031465
		B1LPB1	J7A250129-2	JNC021AE	9JNC0210	7031455
		B1LPB1	J7A250129-2	JNC021AF	9JNC0210	7031450
		B1LPB1	J7A250129-2	JNC021AG	9JNC0210	7031458
		B1LPB1	J7A250129-2	JNC022AD	9JNC0220	7053500
		B1LPB5	J7A250129-3	JNC091AA	9JNC0910	7031404
		B1LPB5	J7A250129-3	JNC091AC	9JNC0910	7031465
		B1LPB5	J7A250129-3	JNC091AE	9JNC0910	7031455
		B1LPB5	J7A250129-3	JNC091AF	9JNC0910	7031450
		B1LPB5	J7A250129-3	JNC091AG	9JNC0910	7031458
		B1LPB5	J7A250129-3	JNC092AD	9JNC0920	7053500
S07-012		B1LC85	J7A250138-2	JNC241AA	9JNC2410	7031455
		B1LC85	J7A250138-2	JNC241AC	9JNC2410	7031458
W07-012		B1LJD1	J7A250148-1	JNC411AA	9JNC4110	7031399
I07-021		B1LNF9	J7A250163-1	JNC7W1AA	9JNC7W10	7031450
S07-001		B1LP00	J7A260157-1	JNFMN1AA	9JNFMN10	7031450
W07-001		B1LRM1	J7A260178-1	JNFRX1AA	9JNFRX10	7031465
		B1LRM1	J7A260178-1	JNFRX2AC	9JNFRX20	7053500
W07-012		B1LJ46	J7A260181-1	JNFTQ1AC	9JNFTQ10	7031455
		B1LJ46	J7A260181-1	JNFTQ1AD	9JNFTQ10	7031399
		B1LJ46	J7A260181-1	JNFTQ1AE	9JNFTQ10	7031396
		B1LJ46	J7A260181-1	JNFTQ2AA	9JNFTQ20	7053500

Comments:

Report Nbr: 34659

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		B1LJ45	J7A260181-2	JNFT01AE	9JNFT010	7031396
		B1LJ45	J7A260181-2	JNFT02AA	9JNFT020	7053500
	S07-010	B1KR91	J7A300174-1	JNKXW1AA	9JNKXW10	7031404
		B1KR91	J7A300174-1	JNKXW1AC	9JNKXW10	7031465
		B1KR91	J7A300174-1	JNKXW2AD	9JNKXW20	7053500
	I07-009	B1L208	J7A300180-1	JNK0D1AA	9JNK0D10	7031450
		B1L208	J7A300180-1	JNK0D1AC	9JNK0D10	7031399

Comments:

SEVERN
TRENT

STL

STL Richland
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Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

March 12, 2007

Attention: Dot Stewart

SAF Number	:	W07-001, S07-001, S07-012, W07-012, S07-010, I07-021, I07-009
Date SDG Closed	:	January 26, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05101
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between January 24, 2007 and January 26, 2007, twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

<u>PGW ID#</u>	<u>STLR ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
B1LP43	JM824	WATER	1/23/07
B1LP34	JM828	WATER	1/28/07
B1LC45	JM83H	WATER	1/23/07
B1LD58	JNCXW	WATER	1/24/07
B1LD63	JNCX1	WATER	1/24/07
B1LPC9	JNC0N	WATER	1/24/07
B1LPB1	JN C02	WATER	1/24/07
B1LPB5	JNC09	WATER	1/24/07
B1LBV0	JNC2T	WATER	1/24/07
B1LC85	JNC24	WATER	1/24/07
B1LBV2	JNC3E	WATER	1/24/07
B1LBV4	JNC3P	WATER	1/24/07
B1LJD1	JNC41	WATER	1/24/07

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March 19, 2007

B1LNF9	JNC7W	WATER	1/24/07
B1LP00	JNFMN	WATER	1/25/07
B1LRM1	JNFRX	WATER	1/25/07
B1LJ46	JNFTQ	WATER	1/25/07
B1LJ45	JNFT0	WATER	1/25/07
B1KR91	JNKXW	WATER	1/26/07
B1L208	JNK0D	WATER	1/26/07

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in. Sample B1LHB1 had a coliform requested on it. It was missed in sample receiving and not given to the analyst before the holding time was up.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Alpha Spectroscopy

Plutonium-238, -239/240 by method RICH-RC-5010
Uranium 234, 235 and 238 by method RICH-RC-5039

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025

Liquid Scintillation Counting

Enriched Tritium by method RICH-RC-5024
Technetium-99 by TEVA method RICH-RC-5065
Tritium by method RICH-RC-5007

Laser Induced Phosphorimetry

Total Uranium by method RICH-RC-5058

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy

Plutonium-238, -239/240 by method RICH-RC-5010

The LCS, batch blank, samples and sample duplicate (B1LP34) results are within contractual requirements.

Uranium 234, 235 and 238 by method RICH-RC-5039

On the first analysis the duplicate was out. It was reanalyzed with good results. Other than as noted, the LCS, batch blank, samples and sample duplicate (B1LD58) results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

The LCS, batch blank, samples and sample duplicate (B1LPC9) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

On the original analysis the LCS had a 17% recovery. It was rerun with good results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1LJ46) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1LC85) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:

There was an obvious blank spike switch. It was corrected in Rad Calc. Except as noted, the LCS, batch blank, samples and sample duplicate (B1LJ46) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:

The LCS, batch blank, samples and sample duplicate (B1L208) results are within contractual requirements.

Liquid Scintillation Counting

Enriched Tritium by method RICH-RC-5024

The enriched tritium analysis was not completed at the time of reporting.

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Technetium-99 by TEVA method RICH-RC-5065:

The LCS, batch blank, samples, sample duplicate (B1LJD1), and sample matrix spike (B1L208) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1KR91) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:

The LCS, batch blank, samples, sample duplicate (B1LJ46), and sample matrix spike (B1LJ46) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:



Sherry A. Adam
Project Manager

Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	STL Richland's SOP number
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, $R = \text{constants} * f(x,y,z,...)$. The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1.2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/\sqrt{n}), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation $(Result/Expected)-1$ as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) u_c - Combined Uncertainty.	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, u_c , the <i>combined uncertainty</i> . The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. $Lc = (1.645 * \sqrt{2 * (BkgndCnt/BkgndCntMin) / SCntMin}) * (\text{ConvFct} / (\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \sqrt{(BkgndCnt/BkgndCntMin) / SCntMin}) + 2.71 / SCntMin * (\text{ConvFct} / (\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = $(S-D)/[\sqrt{(TPUs^2 + TPUs^2)}]$ as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUs is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

3/12/2007 1:28:54 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R		FormatType: FEAD		Version: 05		Rpt Nbr: 34659		File Name: h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd							
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Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act	
7031404	H-3	10028-17-8	1.72E+04	pCi/L	4.4E+02	8.0E+02		3.10E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/11/2007 08:04	I	
7031399	TC-99	14133-76-7	1.18E+02	pCi/L	7.2E+00	1.4E+01		9.94E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	02/13/2007 11:31	I	
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7031455	CO-60	10198-40-0	1.09E+00	pCi/L	2.3E+00	2.3E+00	U	5.05E+00		GAMMALL_GS	2.0003E+00	L	02/22/2007 05:11	I	
7031455	CS-134	13967-70-9	-7.39E-01	pCi/L	2.3E+00	2.3E+00	U	4.07E+00		GAMMALL_GS	2.0003E+00	L	02/22/2007 05:11	I	
7031455	CS-137	10045-97-3	-1.05E+00	pCi/L	2.5E+00	2.5E+00	U	4.33E+00		GAMMALL_GS	2.0003E+00	L	02/22/2007 05:11	I	
7031455	EU-152	14683-23-9	2.26E+00	pCi/L	5.9E+00	5.9E+00	U	1.11E+01		GAMMALL_GS	2.0003E+00	L	02/22/2007 05:11	I	
7031455	EU-154	15585-10-1	-3.30E+00	pCi/L	7.0E+00	7.0E+00	U	1.24E+01		GAMMALL_GS	2.0003E+00	L	02/22/2007 05:11	I	
7031455	EU-155	14391-16-3	8.64E-01	pCi/L	4.8E+00	4.8E+00	U	8.90E+00		GAMMALL_GS	2.0003E+00	L	02/22/2007 05:11	I	
7031455	K-40	13966-00-2	-3.17E+01	pCi/L	5.5E+01	5.5E+01	U	1.22E+02		GAMMALL_GS	2.0003E+00	L	02/22/2007 05:11	I	
7031455	RU-106	13967-48-1	-1.42E+01	pCi/L	2.1E+01	2.1E+01	U	3.46E+01		GAMMALL_GS	2.0003E+00	L	02/22/2007 05:11	I	
7031455	SB-125	14234-35-6	9.74E-01	pCi/L	5.5E+00	5.5E+00	U	1.02E+01		GAMMALL_GS	2.0003E+00	L	02/22/2007 05:11	I	
7031450	I-129L	15046-84-1	1.20E-01	pCi/L	1.5E-01	1.5E-01	U	2.92E-01	103.2	I129LL_SEP_LEPS	3.8928E+00	L	02/22/2007 17:59	I	
7031398	PU-238	13981-16-3	0.00E+00	pCi/L	1.0E-01	1.0E-01	U	2.37E-01	69.0	PUISO_PLATE_AE	2.006E-01	L	02/14/2007 16:52	I	
7031398	PU-239	PU-239/240	-1.98E-02	pCi/L	1.0E-01	1.0E-01	U	2.80E-01	69.0	PUISO_PLATE_AE	2.006E-01	L	02/14/2007 16:52	I	
7031458	SR-90	10098-97-2	-2.42E-01	pCi/L	1.7E-01	1.7E-01	U	4.45E-01	78.5	SRISO_SEP_PRE	1.0054E+00	L	02/22/2007 07:46	I	
7031399	TC-99	14133-76-7	1.29E+02	pCi/L	7.4E+00	1.5E+01		9.92E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	02/13/2007 11:31	I	
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7031450	I-129L	15046-84-1	7.16E-01	pCi/L	2.9E-01	2.9E-01	U	4.71E-01	100.8	I129LL_SEP_LEPS	3.9072E+00	L	02/22/2007 18:03	I	
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9JNC0210	B1LPB1		MW6-SBB-A1	S07-001	W05101					01/24/2007 09:31					

3/12/2007 1:28:54 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R		FormatType: FEAD		Version: 05		Rpt Nbr: 34659		File Name: h:\Reportdb\edd\FeadIV\Rad\W05101.Edd, h:\Reportdb\edd\FeadIV\Rad\34659.Edd										
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act				
7031404	H-3	10028-17-8	2.44E+03	pCi/L	2.0E+02	2.5E+02		3.09E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/11/2007 10:48	I				
7031465	ALPHA	12587-46-1	9.11E-01	pCi/L	1.1E+00	1.1E+00	U	2.11E+00	100.0	9310_ALPHABETA	1.945E-01	L	02/22/2007 11:33	I				
7031455	BE-7	13966-02-4	-1.20E+00	pCi/L	1.9E+01	1.9E+01	U	3.62E+01		GAMMALL_GS	2.00E+00	L	02/22/2007 05:12	I				
7031455	CO-60	10198-40-0	-1.48E+00	pCi/L	2.3E+00	2.3E+00	U	3.90E+00		GAMMALL_GS	2.00E+00	L	02/22/2007 05:12	I				
7031455	CS-134	13967-70-9	2.83E-01	pCi/L	2.5E+00	2.5E+00	U	4.77E+00		GAMMALL_GS	2.00E+00	L	02/22/2007 05:12	I				
7031455	CS-137	10045-97-3	3.51E-01	pCi/L	2.4E+00	2.4E+00	U	4.49E+00		GAMMALL_GS	2.00E+00	L	02/22/2007 05:12	I				
7031455	EU-152	14683-23-9	3.35E+00	pCi/L	5.6E+00	5.6E+00	U	1.06E+01		GAMMALL_GS	2.00E+00	L	02/22/2007 05:12	I				
7031455	EU-154	15585-10-1	-2.35E+00	pCi/L	7.5E+00	7.5E+00	U	1.35E+01		GAMMALL_GS	2.00E+00	L	02/22/2007 05:12	I				
7031455	EU-155	14391-16-3	-1.59E+00	pCi/L	3.6E+00	3.6E+00	U	6.22E+00		GAMMALL_GS	2.00E+00	L	02/22/2007 05:12	I				
7031455	K-40	13966-00-2	-1.94E+01	pCi/L	5.2E+01	5.2E+01	U	1.12E+02		GAMMALL_GS	2.00E+00	L	02/22/2007 05:12	I				
7031455	RU-106	13967-48-1	-2.19E+01	pCi/L	2.1E+01	2.1E+01	U	3.33E+01		GAMMALL_GS	2.00E+00	L	02/22/2007 05:12	I				
7031455	SB-125	14234-35-6	-1.24E+00	pCi/L	5.9E+00	5.9E+00	U	1.04E+01		GAMMALL_GS	2.00E+00	L	02/22/2007 05:12	I				
7031450	I-129L	15046-84-1	5.20E-02	pCi/L	1.4E-01	1.4E-01	U	2.65E-01	92.2	I129LL_SEP_LEPS	3.897E+00	L	02/22/2007 20:00	I				
7031458	SR-90	10098-97-2	4.50E-03	pCi/L	1.6E-01	2.3E-01	U	5.09E-01	70.1	SRISO_SEP_PRE	1.0019E+00	L	02/22/2007 07:46	I				
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:								
										01/24/2007 09:31								
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act				
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:								
										01/24/2007 10:46								
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act				
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:								
										01/24/2007 10:46								
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act				
7031404	H-3	10028-17-8	4.60E+04	pCi/L	7.0E+02	1.9E+03		3.09E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/11/2007 12:09	I				
7031465	ALPHA	12587-46-1	7.20E-01	pCi/L	8.7E-01	8.9E-01	U	1.60E+00	100.0	9310_ALPHABETA	2.00E-01	L	02/22/2007 11:33	I				
7031455	BE-7	13966-02-4	1.38E+01	pCi/L	2.2E+01	2.2E+01	U	4.31E+01		GAMMALL_GS	2.0025E+00	L	02/22/2007 05:12	I				
7031455	CO-60	10198-40-0	-1.11E-01	pCi/L	2.4E+00	2.4E+00	U	4.64E+00		GAMMALL_GS	2.0025E+00	L	02/22/2007 05:12	I				
7031455	CS-134	13967-70-9	-6.57E-01	pCi/L	2.3E+00	2.3E+00	U	4.19E+00		GAMMALL_GS	2.0025E+00	L	02/22/2007 05:12	I				
7031455	CS-137	10045-97-3	-1.36E+00	pCi/L	2.0E+00	2.0E+00	U	3.26E+00		GAMMALL_GS	2.0025E+00	L	02/22/2007 05:12	I				
7031455	EU-152	14683-23-9	-5.19E+00	pCi/L	5.7E+00	5.7E+00	U	9.08E+00		GAMMALL_GS	2.0025E+00	L	02/22/2007 05:12	I				
7031455	EU-154	15585-10-1	6.31E-01	pCi/L	5.7E+00	5.7E+00	U	1.18E+01		GAMMALL_GS	2.0025E+00	L	02/22/2007 05:12	I				
7031455	EU-155	14391-16-3	1.54E+00	pCi/L	3.9E+00	3.9E+00	U	7.34E+00		GAMMALL_GS	2.0025E+00	L	02/22/2007 05:12	I				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

2

3/12/2007 1:28:54 PM

STL Richland Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	Version:	05	Rpt Nbr:	34659	File Name: h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd							
Batch	Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
7031455	K-40	13966-00-2	3.52E+00	pCi/L	4.2E+01	4.2E+01	U	9.42E+01	GAMMALL_GS	2.0025E+00	L	02/22/2007	05:12	I	
7031455	RU-106	13967-48-1	1.90E+00	pCi/L	1.8E+01	1.8E+01	U	3.47E+01	GAMMALL_GS	2.0025E+00	L	02/22/2007	05:12	I	
7031455	SB-125	14234-35-6	-2.45E+00	pCi/L	5.8E+00	5.8E+00	U	1.00E+01	GAMMALL_GS	2.0025E+00	L	02/22/2007	05:12	I	
7031450	I-129L	15046-84-1	2.33E+00	pCi/L	4.3E-01	4.3E-01		2.82E-01	97.6	I129LL_SEP_LEPS	3.937E+00	L	02/22/2007	20:04	I
7031458	SR-90	10098-97-2	-4.12E-03	pCi/L	2.0E-01	2.0E-01	U	4.50E-01	73.6	SRISO_SEP_PRE	1.0013E+00	L	02/22/2007	07:46	I
Batch	Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNC0920	B1LPB5	MW6-SBB-A1	S07-001	W05101							01/24/2007 10:46				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act	
7053500	BETA	12587-47-2	1.59E+01	pCi/L	2.2E+00	3.0E+00		2.83E+00	100.0	9310_ALPHABETA	2.017E-01	L	02/26/2007	14:10	I
Batch	Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNC0N10	B1LPC9	MW6-SBB-A1	S07-001	W05101							01/24/2007 12:16				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act	
7031404	H-3	10028-17-8	6.75E+04	pCi/L	8.4E+02	2.7E+03		3.10E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/11/2007	09:26	I
7031465	ALPHA	12587-46-1	2.42E+00	pCi/L	1.6E+00	1.7E+00		2.22E+00	100.0	9310_ALPHABETA	2.006E-01	L	02/22/2007	11:33	I
7031455	BE-7	13966-02-4	-2.93E+01	pCi/L	2.6E+01	2.6E+01	U	3.90E+01	GAMMALL_GS	1.9997E+00	L	02/22/2007	05:08	I	
7031455	CO-60	10198-40-0	-1.46E+00	pCi/L	2.9E+00	2.9E+00	U	5.13E+00	GAMMALL_GS	1.9997E+00	L	02/22/2007	05:08	I	
7031455	CS-134	13967-70-9	-7.51E-01	pCi/L	3.2E+00	3.2E+00	U	5.63E+00	GAMMALL_GS	1.9997E+00	L	02/22/2007	05:08	I	
7031455	CS-137	10045-97-3	1.68E+00	pCi/L	2.1E+00	2.1E+00	U	4.33E+00	GAMMALL_GS	1.9997E+00	L	02/22/2007	05:08	I	
7031455	EU-152	14683-23-9	-5.14E+00	pCi/L	6.0E+00	6.0E+00	U	9.96E+00	GAMMALL_GS	1.9997E+00	L	02/22/2007	05:08	I	
7031455	EU-154	15585-10-1	6.51E+00	pCi/L	6.8E+00	6.8E+00	U	1.56E+01	GAMMALL_GS	1.9997E+00	L	02/22/2007	05:08	I	
7031455	EU-155	14391-16-3	2.76E+00	pCi/L	4.6E+00	4.6E+00	U	8.32E+00	GAMMALL_GS	1.9997E+00	L	02/22/2007	05:08	I	
7031455	K-40	13966-00-2	1.95E+01	pCi/L	6.7E+01	6.7E+01	U	5.22E+01	GAMMALL_GS	1.9997E+00	L	02/22/2007	05:08	I	
7031455	RU-106	13967-48-1	-1.41E+01	pCi/L	2.1E+01	2.1E+01	U	3.44E+01	GAMMALL_GS	1.9997E+00	L	02/22/2007	05:08	I	
7031455	SB-125	14234-35-6	-1.05E+00	pCi/L	6.0E+00	6.0E+00	U	1.07E+01	GAMMALL_GS	1.9997E+00	L	02/22/2007	05:08	I	
7031450	I-129L	15046-84-1	2.31E-01	pCi/L	1.6E-01	1.6E-01	U	3.28E-01	100.3	I129LL_SEP_LEPS	3.9375E+00	L	02/22/2007	18:04	I
7031458	SR-90	10098-97-2	-1.08E-01	pCi/L	1.9E-01	1.9E-01	U	4.65E-01	73.3	SRISO_SEP_PRE	1.0058E+00	L	02/22/2007	07:46	I
Batch	Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNC0N20	B1LPC9	MW6-SBB-A1	S07-001	W05101							01/24/2007 12:16				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act	
7053500	BETA	12587-47-2	3.30E+01	pCi/L	3.0E+00	5.2E+00		2.99E+00	100.0	9310_ALPHABETA	2.026E-01	L	02/26/2007	14:10	I

STL Richland
rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/12/2007 1:28:54 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R		FormatType: FEAD		Version: 05		Rpt Nbr: 34659		File Name: h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd									
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:							
9JNC2410	B1LC85		MW6-SBB-A1	S07-012	W05101					01/24/2007 09:56							
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act			
7031455	BE-7	13966-02-4	-2.30E+01	pCi/L	2.0E+01	2.0E+01	U	3.18E+01		GAMMALL_GS	2.001E+00	L	02/22/2007 05:12	I			
7031455	CO-60	10198-40-0	6.90E-01	pCi/L	2.3E+00	2.3E+00	U	4.72E+00		GAMMALL_GS	2.001E+00	L	02/22/2007 05:12	I			
7031455	CS-134	13967-70-9	9.03E-01	pCi/L	2.0E+00	2.0E+00	U	4.10E+00		GAMMALL_GS	2.001E+00	L	02/22/2007 05:12	I			
7031455	CS-137	10045-97-3	-3.49E-01	pCi/L	1.6E+00	1.6E+00	U	2.96E+00		GAMMALL_GS	2.001E+00	L	02/22/2007 05:12	I			
7031455	EU-152	14683-23-9	-2.59E-01	pCi/L	4.9E+00	4.9E+00	U	8.75E+00		GAMMALL_GS	2.001E+00	L	02/22/2007 05:12	I			
7031455	EU-154	15585-10-1	-1.59E+00	pCi/L	4.3E+00	4.3E+00	U	7.94E+00		GAMMALL_GS	2.001E+00	L	02/22/2007 05:12	I			
7031455	EU-155	14391-16-3	-2.01E-01	pCi/L	3.5E+00	3.5E+00	U	6.24E+00		GAMMALL_GS	2.001E+00	L	02/22/2007 05:12	I			
7031455	K-40	13966-00-2	-1.00E+01	pCi/L	3.0E+01	3.0E+01	U	6.34E+01		GAMMALL_GS	2.001E+00	L	02/22/2007 05:12	I			
7031455	RU-106	13967-48-1	-5.30E+00	pCi/L	1.7E+01	1.7E+01	U	2.98E+01		GAMMALL_GS	2.001E+00	L	02/22/2007 05:12	I			
7031455	SB-125	14234-35-6	8.44E-01	pCi/L	4.8E+00	4.8E+00	U	8.85E+00		GAMMALL_GS	2.001E+00	L	02/22/2007 05:12	I			
7031458	SR-90	10098-97-2	-1.05E-01	pCi/L	1.9E-01	1.9E-01	U	4.60E-01	83.3	SRISO_SEP_PRE	9.952E-01	L	02/22/2007 07:46	I			
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:							
9JNC4110	B1LJD1		MW6-SBB-A1	S07-012	W05101					01/24/2007 10:26							
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act			
7031399	TC-99	14133-76-7	1.13E+02	pCi/L	7.0E+00	1.4E+01		9.84E+00	100.0	TC99_ETVDSK_LS	1.264E-01	L	02/13/2007 11:31	I			
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:							
9JNC7W10	B1LNF9		MW6-SBB-A1	I07-021	W05101					01/24/2007 12:30							
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act			
7031450	I-129L	15046-84-1	-7.51E-02	pCi/L	1.0E-01	1.0E-01	U	1.74E-01	99.7	I129LL_SEP_LEPS	3.8172E+00	L	02/22/2007 20:04	I			
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:							
9JNCX110	B1LD63		MW6-SBB-A1	S07-012	W05101					01/24/2007 09:40							
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act			
7031396	Uranium	7440-61-1	5.27E+00	ug/L	5.4E-01	5.4E-01		8.35E-02		UTOT_KPA	2.51E-02	ML	02/28/2007 10:35	I			
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:							
9JNCXW10	B1LD58		MW6-SBB-A1	S07-012	W05101					01/24/2007 10:44							
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act			
7031399	TC-99	14133-76-7	2.57E+01	pCi/L	4.9E+00	7.8E+00		9.93E+00	100.0	TC99_ETVDSK_LS	1.254E-01	L	02/13/2007 11:31	I			

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/12/2007 1:28:54 PM

STL Richland Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	Version:	05	Rpt Nbr:	34659	File Name:	h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd							
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:						
7031396	Uranium	7440-61-1	3.81E+01	ug/L	4.5E+00	4.5E+00	8.25E-02	UTOT_KPA	2.54E-02	ML	02/28/2007	10:33	I			
9JNCXW20		B1LD58		MW6-SBB-A1	S07-012	W05101					01/24/2007 10:44					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act		
7046186	U-234	13966-29-5	1.03E+01	pCi/L	1.1E+00	2.1E+00		2.79E-01	93.5	UIISO_PLATE_AEA	2.043E-01	L	02/20/2007	19:19	I	
7046186	U-235	15117-96-1	5.81E-01	pCi/L	2.7E-01	2.9E-01		1.76E-01	93.5	UIISO_PLATE_AEA	2.043E-01	L	02/20/2007	19:19	I	
7046186	U-238	U-238	1.37E+01	pCi/L	1.3E+00	2.6E+00		2.30E-01	93.5	UIISO_PLATE_AEA	2.043E-01	L	02/20/2007	19:19	I	
9JNFMN10		B1LP00		MW6-SBB-A1	S07-001	W05101					01/25/2007 13:14					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act		
7031450	I-129L	15046-84-1	-4.92E-02	pCi/L	1.3E-01	1.3E-01	U	2.29E-01	94.1	I129LL_SEP_LEPS	3.9748E+00	L	02/22/2007	21:53	I	
9JNFRX10		B1LRM1		MW6-SBB-A1	W07-001	W05101					01/25/2007 13:14					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act		
7031465	ALPHA	12587-46-1	2.74E+00	pCi/L	1.8E+00	1.9E+00	U	2.84E+00	100.0	9310_ALPHABETA	1.114E-01	L	02/22/2007	13:03	I	
9JNFRX20		B1LRM1		MW6-SBB-A1	W07-001	W05101					01/25/2007 13:14					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act		
7053500	BETA	12587-47-2	1.13E+01	pCi/L	2.4E+00	2.8E+00		3.67E+00	100.0	9310_ALPHABETA	1.526E-01	L	02/26/2007	14:10	I	
9JNFT010		B1LJ45		MW6-SBB-A1	W07-012	W05101					01/25/2007 12:05					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act		
7031455	BE-7	13966-02-4	1.09E+01	pCi/L	2.1E+01	2.1E+01	U	4.15E+01		GAMMALL_GS	2.0026E+00	L	02/22/2007	06:58	I	
7031455	CO-60	10198-40-0	3.24E+00	pCi/L	3.1E+00	3.1E+00	U	6.64E+00		GAMMALL_GS	2.0026E+00	L	02/22/2007	06:58	I	
7031455	CS-134	13967-70-9	5.86E-01	pCi/L	2.6E+00	2.6E+00	U	5.03E+00		GAMMALL_GS	2.0026E+00	L	02/22/2007	06:58	I	
7031455	CS-137	10045-97-3	9.53E-01	pCi/L	2.3E+00	2.3E+00	U	4.52E+00		GAMMALL_GS	2.0026E+00	L	02/22/2007	06:58	I	
7031455	EU-152	14683-23-9	-6.56E-01	pCi/L	5.3E+00	5.3E+00	U	9.36E+00		GAMMALL_GS	2.0026E+00	L	02/22/2007	06:58	I	
7031455	EU-154	15585-10-1	5.53E-03	pCi/L	7.0E+00	7.0E+00	U	1.36E+01		GAMMALL_GS	2.0026E+00	L	02/22/2007	06:58	I	
7031455	EU-155	14391-16-3	4.21E-01	pCi/L	3.5E+00	3.5E+00	U	6.43E+00		GAMMALL_GS	2.0026E+00	L	02/22/2007	06:58	I	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/12/2007 1:28:54 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R		FormatType: FEAD		Version: 05		Rpt Nbr: 34659		File Name: h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd						
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
7031455	K-40	13966-00-2	-4.17E+01	pCi/L	5.0E+01	5.0E+01	U	1.05E+02	GAMMALL_GS	2.0026E+00	L	02/22/2007 06:58	I	
7031455	RU-106	13967-48-1	1.81E+01	pCi/L	2.1E+01	2.1E+01	U	4.31E+01	GAMMALL_GS	2.0026E+00	L	02/22/2007 06:58	I	
7031455	SB-125	14234-35-6	-3.41E-01	pCi/L	5.8E+00	5.8E+00	U	1.03E+01	GAMMALL_GS	2.0026E+00	L	02/22/2007 06:58	I	
7031399	TC-99	14133-76-7	2.04E+03	pCi/L	2.5E+01	1.4E+02		9.89E+00	100.0	TC99_ETVDSK_LS	1.257E-01	L	02/13/2007 11:31	I
7031396	Uranium	7440-61-1	2.47E+00	ug/L	2.5E-01	2.5E-01		8.03E-02	UTOT_KPA	2.61E-02	ML	02/28/2007 10:45	I	
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNFTQ20	B1LJ45	MW6-SBB-A1 W07-012 W05101											01/25/2007 12:05	
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7053500	BETA	12587-47-2	5.15E+02	pCi/L	1.2E+01	6.7E+01		3.71E+00	100.0	9310_ALPHABETA	1.536E-01	L	02/26/2007 14:10	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNFTQ10	B1LJ46	MW6-SBB-A1 W07-012 W05101											01/25/2007 12:05	
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7031455	BE-7	13966-02-4	9.31E+00	pCi/L	2.2E+01	2.2E+01	U	4.38E+01	GAMMALL_GS	1.9708E+00	L	02/22/2007 06:57	I	
7031455	CO-60	10198-40-0	1.34E+00	pCi/L	3.0E+00	3.0E+00	U	6.09E+00	GAMMALL_GS	1.9708E+00	L	02/22/2007 06:57	I	
7031455	CS-134	13967-70-9	9.41E-01	pCi/L	2.1E+00	2.1E+00	U	4.35E+00	GAMMALL_GS	1.9708E+00	L	02/22/2007 06:57	I	
7031455	CS-137	10045-97-3	0.00E+00	pCi/L	0.0E+00	0.0E+00	U	4.03E+00	GAMMALL_GS	1.9708E+00	L	02/22/2007 06:57	I	
7031455	EU-152	14683-23-9	-5.14E+00	pCi/L	5.6E+00	5.6E+00	U	8.93E+00	GAMMALL_GS	1.9708E+00	L	02/22/2007 06:57	I	
7031455	EU-154	15585-10-1	3.06E+00	pCi/L	6.4E+00	6.4E+00	U	1.38E+01	GAMMALL_GS	1.9708E+00	L	02/22/2007 06:57	I	
7031455	EU-155	14391-16-3	5.25E-01	pCi/L	5.3E+00	5.3E+00	U	9.57E+00	GAMMALL_GS	1.9708E+00	L	02/22/2007 06:57	I	
7031455	K-40	13966-00-2	-2.61E+01	pCi/L	5.6E+01	5.6E+01	U	1.25E+02	GAMMALL_GS	1.9708E+00	L	02/22/2007 06:57	I	
7031455	RU-106	13967-48-1	7.15E+00	pCi/L	1.9E+01	1.9E+01	U	3.75E+01	GAMMALL_GS	1.9708E+00	L	02/22/2007 06:57	I	
7031455	SB-125	14234-35-6	2.74E-01	pCi/L	5.7E+00	5.7E+00	U	1.03E+01	GAMMALL_GS	1.9708E+00	L	02/22/2007 06:57	I	
7031399	TC-99	14133-76-7	2.02E+03	pCi/L	2.5E+01	1.4E+02		9.89E+00	100.0	TC99_ETVDSK_LS	1.258E-01	L	02/13/2007 11:31	I
7031396	Uranium	7440-61-1	2.47E+00	ug/L	2.5E-01	2.5E-01		8.19E-02	UTOT_KPA	2.56E-02	ML	02/28/2007 10:38	I	
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNFTQ20	B1LJ46	MW6-SBB-A1 W07-012 W05101											01/25/2007 12:05	
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7053500	BETA	12587-47-2	4.51E+02	pCi/L	1.1E+01	6.0E+01		3.83E+00	100.0	9310_ALPHABETA	1.532E-01	L	02/26/2007 14:10	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				

STL Richland
rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/12/2007 1:28:54 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R		FormatType: FEAD		Version: 05		Rpt Nbr: 34659		File Name: h:\Reportdb\edd\Fead\IV\Rad\W05101.Edd, h:\Reportdb\edd\Fead\IV\Rad\34659.Edd										
9JNK0D10 B1L208 MW6-SBB-A1 I07-009 W05101 01/26/2007 09:01																		
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act				
7031450	I-129L	15046-84-1	1.85E+00	pCi/L	4.3E-01	4.3E-01		2.71E-01	98.4	I129LL_SEP_LEPS	3.9194E+00	L	02/22/2007 21:57	I				
7031399	TC-99	14133-76-7	3.08E+02	pCi/L	1.0E+01	2.7E+01		9.99E+00	100.0	TC99_ETVDSK_LS	1.257E-01	L	02/13/2007 11:31	I				
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume		Sample On Date:		Collection Date:						
9JNKXW10 B1KR91	MW6-SBB-A1 S07-010		W05101									01/26/2007 12:55						
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act				
7031404	H-3	10028-17-8	-5.94E+01	pCi/L	1.2E+02	1.5E+02	U	3.09E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/11/2007 13:31	I				
7031465	ALPHA	12587-46-1	5.81E+00	pCi/L	2.5E+00	2.8E+00		1.97E+00	100.0	9310_ALPHABETA	1.663E-01	L	02/22/2007 11:33	I				
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume		Sample On Date:		Collection Date:						
9JNKXW20 B1KR91	MW6-SBB-A1 S07-010		W05101									01/26/2007 12:55						
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act				
7053500	BETA	12587-47-2	1.09E+01	pCi/L	2.0E+00	2.4E+00		2.85E+00	100.0	9310_ALPHABETA	1.971E-01	L	02/26/2007 14:10	I				

Monday, March 12, 2007

STL Richland Report

Lab Code: STLRL

FormNbr: R	FormatType: FEAD	VersionNbr: 05	File Name: h:\Reportdb\edd\FeadIV\Rad\W05101.Edd, h:\Reportdb\edd\FeadIV\Rad\34659.Edd												
Lab Sample Id: JNNG51DN	Sdg/Rept Nbr: W05101	34659	Collection Date: 01/26/2007 09:01												
Client Id: INTRA-LAB BL	Matrix: WATER	WATER	Sample On Date:												
Moisture/Solids%*:	QC Type:		Received Date: 01/26/2007												
SAF Nbr	Contract Nbr MW6-SBB-A19981	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031399	TC-99 14133-76-7	1.44E+03	pCi/L	1.4E+02 1.0E+02			100.0		TC99_ETVDSK	5.00E-03 L	02/13/2007 11:31				D

Monday, March 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Feadl\Rad\W05101.Edd, h:\Reportdb\edd\Feadl\Rad\34659.Edd

Lab Sample Id: JNNG21AB

Sdg/Rept Nbr: W05101 34659

Collection Date: 01/23/2007 12:56

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/23/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BL	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/
7031398 PU-238	0.00E+00	pCi/L	1.4E-01	U	3.28E-01	51.2		PUISO_PLATE	2.008E-01	02/14/2007
BLK 13981-16-3			1.4E-01					L		16:52
7031398 PU-239	4.10E-02	pCi/L	1.4E-01	U	3.87E-01	51.2		PUISO_PLATE	2.008E-01	02/14/2007
BLK PU-239/240			1.4E-01					L		16:52

Monday, March 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Feadl\V\Rad\W05101.Edd, h:\Reportdb\edd\Feadl\V\Rad\34659.Edd		
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Lab Sample Id:	JNNG51AB	Sdg/Rept Nbr:	W05101	34659	Collection Date:	01/26/2007 09:01		
Client Id:	NA	Matrix:	WATER	WATER	Sample On Date:			
Moisture/Solids%*:		QC Type:	BLK		Received Date:	01/26/2007		

SAF Nbr	Contract Nbr MW6-SBB-A19981	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031399	TC-99 BLK	-4.22E+00 14133-76-7	pCi/L	5.9E+00 3.9E+00	U	9.84E+00	100.0		TC99_ETVDSK	1.266E-01 L	02/13/2007 11:32			D	

Monday, March 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd

Lab Sample Id: JNNGR1AB

Sdg/Rept Nbr: W05101 34659

Collection Date: 01/25/2007 12:05

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/25/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Tot/Cnt Unit	Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031396	Uranium	0.00E+00	ug/L	0.0E+00	U	2.10E-01		UTOT_KPA		2.51E-02	02/28/2007			D	
BLK	7440-61-1			0.0E+00						ML	13:44				

Monday, March 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\IV\Rad\W05101.Edd, h:\Reportdb\edd\Fead\IV\Rad\34659.Edd

Lab Sample Id: JNNHL1AB Sdg/Rept Nbr: W05101 34659 Collection Date: 01/26/2007 12:55

Client Id: NA Matrix: WATER WATER Sample On Date:

Moisture/Solids%*: QC Type: BLK Received Date: 01/26/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BT	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	Tracer MDC	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed
7031404	H-3	-1.40E+02	pCi/L	1.5E+02	U	3.10E+02	100.0	906.0_H3_LSC	5.00E-03	02/11/2007 02:37

Monday, March 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Fead\V\Rad\W05101.Edd, h:\Reportdb\edd\Feadi\V\Rad\34659.Edd			
Lab Sample Id:	JNNHL1DX	Sdg/Rept Nbr:	W05101	34659		Collection Date:	01/26/2007 12:55			
Client Id:	NA	Matrix:	WATER	WATER		Sample On Date:				
Moisture/Solids%*:		QC Type:	BLK			Received Date:	01/26/2007			
SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BV	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/
7031404	H-3	1.51E+02	pCi/L	1.6E+02	U	3.14E+02	100.0		906.0_H3_LSC	5.00E-03
BLK	10028-17-8			1.3E+02					L	05:21

Monday, March 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd								
Lab Sample Id:	JNNP51AB	Sdg/Rept Nbr:	W05101	34659		Collection Date:	01/24/2007 09:56								
Client Id:	NA	Matrix:	WATER	WATER		Sample On Date:									
Moisture/Solids%*:			QC Type:	BLK		Received Date:	01/24/2007								
SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BX	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031458	SR-90	-4.66E-02	pCi/L	1.9E-01	U	4.56E-01	78.4		SRISO_SEP_P	1.0004E+00	02/22/2007 L			D	
BLK	10098-97-2			1.9E-01							07:46				

Monday, March 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\IV\Rad\W05101.Edd, h:\Reportdb\edd\Fead\IV\Rad\34659.Edd

Lab Sample Id: JNNPC1AB

Sdg/Rept Nbr: W05101 34659

Collection Date: 01/26/2007 09:01

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/26/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031450	I-129L	-1.34E-02	pCi/L	1.2E-01	U	2.13E-01	99.7		I129LL_SEP_L	3.9759E+00	02/23/2007				D
BLK	15046-84-1			1.2E-01					L		05:08				

Monday, March 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd					
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Lab Sample Id:	JNNPX1CB	Sdg/Rept Nbr:	W05101	34659	Collection Date:	01/25/2007 12:05					
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Client Id:	NA	Matrix:	WATER	WATER	Sample On Date:						
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Moisture/Solids%*:		QC Type:	BLK	Received Date:	01/25/2007					
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SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031455 BE-7 BLK 13966-02-4	9.98E-01	pCi/L	1.3E+01 1.3E+01	U	2.41E+01				GAMMALL_GS	2.0026E+00 L	02/22/2007 06:58				D
7031455 CO-60 BLK 10198-40-0	6.45E-01	pCi/L	1.6E+00 1.6E+00	U	3.68E+00				GAMMALL_GS	2.0026E+00 L	02/22/2007 06:58				D
7031455 CS-134 BLK 13967-70-9	2.16E-01	pCi/L	2.4E+00 2.4E+00	U	4.45E+00				GAMMALL_GS	2.0026E+00 L	02/22/2007 06:58				D
7031455 CS-137 BLK 10045-97-3	-1.03E+00	pCi/L	2.0E+00 2.0E+00	U	3.51E+00				GAMMALL_GS	2.0026E+00 L	02/22/2007 06:58				D
7031455 EU-152 BLK 14683-23-9	-1.34E+00	pCi/L	4.8E+00 4.8E+00	U	8.38E+00				GAMMALL_GS	2.0026E+00 L	02/22/2007 06:58				D
7031455 EU-154 BLK 15585-10-1	2.71E+00	pCi/L	4.6E+00 4.6E+00	U	1.09E+01				GAMMALL_GS	2.0026E+00 L	02/22/2007 06:58				D
7031455 EU-155 BLK 14391-16-3	-1.91E+00	pCi/L	3.6E+00 3.6E+00	U	6.07E+00				GAMMALL_GS	2.0026E+00 L	02/22/2007 06:58				D
7031455 K-40 BLK 13966-00-2	7.58E-01	pCi/L	3.0E+01 3.0E+01	U	6.62E+01				GAMMALL_GS	2.0026E+00 L	02/22/2007 06:58				D
7031455 RU-106 BLK 13967-48-1	-1.00E+01	pCi/L	1.8E+01 1.8E+01	U	3.01E+01				GAMMALL_GS	2.0026E+00 L	02/22/2007 06:58				D
7031455 SB-125 BLK 14234-35-6	5.04E+00	pCi/L	5.0E+00 5.0E+00	U	1.00E+01				GAMMALL_GS	2.0026E+00 L	02/22/2007 06:58				D

Monday, March 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Feadl\Rad\W05101.Edd, h:\Reportdb\edd\Feadl\Rad\34659.Edd

Lab Sample Id: JNNQK1AB

Sdg/Rept Nbr: W05101 34659

Collection Date: 01/24/2007 12:16

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/24/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS	R Typ
7031465	ALPHA	-9.36E-02	pCi/L	1.7E-01	U	6.12E-01	100.0		9310_ALPHAB	2.036E-01	02/22/2007			D	
BLK	12587-46-1			1.7E-01						L	13:03				

Monday, March 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd

Lab Sample Id: JPGFT1AB

Sdg/Rept Nbr: W05101

34659

Collection Date: 01/24/2007 10:44

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 01/24/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046186	U-234	8.42E-02	pCi/L	1.3E-01	U	2.66E-01	90.5		UIISO_PLATE_	2.003E-01	02/20/2007				D
BLK	13966-29-5			1.3E-01					L		19:19				
7046186	U-235	2.59E-02	pCi/L	6.6E-02	U	1.55E-01	90.5		UIISO_PLATE_	2.003E-01	02/20/2007				D
BLK	15117-96-1			6.6E-02					L		19:19				
7046186	U-238	-6.49E-02	pCi/L	7.7E-02	U	3.01E-01	90.5		UIISO_PLATE_	2.003E-01	02/20/2007				D
BLK	U-238			7.7E-02					L		19:19				

Monday, March 12, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\V\Rad\W05101.Edd, h:\Reportdb\edd\Fead\V\Rad\34659.Edd

Lab Sample Id: JPXHP1AB

Sdg/Rept Nbr: W05101 34659

34659

Collection Date: 01/24/2007 12:16

Sample On Date:

Received Date: 01/24/2007

Client Id: NA

Matrix: WATER WATER

WATER

Moisture/Solids%^a:

QC Type: BLK

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix	Decant	Distilled Volume			File Id		FSuffix	RTyp
		MW6-SBB-A19981															CH	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ			
7053500	BETA	1.99E+00	pCi/L	1.3E+00	U	2.38E+00	100.0		9310_ALPHAB	1.993E-01	02/26/2007					D		
BLK	12587-47-2			1.2E+00						L	14:10							

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name: h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd									
Lab Sample Id:	JNNG21CS	Sdg/Rept Nbr:	W05101	34659	Collection Date: 01/23/2007 12:56										
Client Id:	NA	Matrix:	WATER	WATER	Sample On Date:										
Moisture/Solids%*:		QC Type:	BS		Received Date: 01/23/2007										
SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix RTyp						
	MW6-SBB-A19981								BM H						
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031398	PU-239 BS	4.02E+00 PU-239/240	pCi/L	1.3E+00 1.1E+00		3.72E-01	42.3	4.51E+00 89.3	PUISO_PLATE	2.031E-01 L	02/14/2007 16:53			75 125	D

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\FeadIV\Rad\W05101.Edd, h:\Reportdb\edd\FeadIV\Rad\34659.Edd								
Lab Sample Id:	JNNG51CS	Sdg/Rept Nbr:	W05101	34659		Collection Date:	01/26/2007 09:01								
Client Id:	NA	Matrix:	WATER	WATER		Sample On Date:									
Moisture/Solids%*:		QC Type:	BS			Received Date:	01/26/2007								
SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BO	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031399	TC-99	5.22E+02	pCi/L	4.1E+01		9.95E+00	100.0	5.42E+02	TC99_ETVDSK	1.251E-01	02/13/2007			70	D
BS	14133-76-7			1.3E+01				96.2		L	11:32			130	

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd		
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Lab Sample Id:	JNNGR1CS	Sdg/Rept Nbr:	W05101	34659	Collection Date:	01/25/2007 12:05		
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Client Id:	NA	Matrix:	WATER	WATER	Sample On Date:			
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Moisture/Solids%*:		QC Type:	BS	Received Date:	01/25/2007		
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SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031396	Uranium	3.54E+01	ug/L	4.2E+00		8.38E-02		3.61E+01	UTOT_KPA	2.50E-02	02/28/2007		70	D	
BS	7440-61-1			4.2E+00				98.0		ML	10:50			130	

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R	FormatType: FEAD	VersionNbr: 05	File Name: h:\Reportdb\edd\Feadl\Rad\W05101.Edd, h:\Reportdb\edd\Feadl\Rad\34659.Edd
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Lab Sample Id: JNNGR1DS	Sdg/Rept Nbr: W05101	34659	Collection Date: 01/25/2007 12:05
Client Id: NA	Matrix: WATER	WATER	Sample On Date:
Moisture/Solids%*: Moisture/Solids%*	QC Type: BS		Received Date: 01/25/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031396	Uranium	3.65E+00	ug/L	3.7E-01		8.25E-02		3.56E+00	UTOT_KPA	2.54E-02	02/28/2007			70	D
BS	7440-61-1			3.7E-01				102.5		ML	16:02			130	

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Feadl\V\Rad\W05101.Edd, h:\Reportdb\edd\Feadl\V\Rad\34659.Edd
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Lab Sample Id:	JNNHL1CS	Sdg/Rept Nbr:	W05101	34659	Collection Date:	01/26/2007 12:55
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Client Id:	NA	Matrix:	WATER	WATER	Sample On Date:	
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Moisture/Solids%*:		QC Type:	BS	Received Date:	01/26/2007
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SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BU	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Tot/Cnt Unit	Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/
7031404	H-3	2.57E+03	pCi/L	2.6E+02		3.09E+02	100.0	2.71E+03	906.0_H3_LSC	5.00E-03
BS	10028-17-8			2.1E+02				94.8		L
									Date/Time Analyzed	RPD/ UCL
									02/11/2007 03:59	RER/ UCL
										LCS LCL/UCL
										R Typ
										70 D
										130

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Feadl\V\Rad\W05101.Edd, h:\Reportdb\edd\Feadl\V\Rad\34659.Edd

Lab Sample Id: JNNHL1EM

Sdg/Rept Nbr: W05101 34659

Collection Date: 01/26/2007 12:55

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/26/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS	R Typ
7031404	H-3	2.54E+03	pCi/L	2.5E+02		3.13E+02	100.0	2.71E+03	906.0_H3_LSC	5.00E-03	02/11/2007			70	D
BS	10028-17-8			2.1E+02				93.6		L	06:42			130	

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd			
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Lab Sample Id:	JNNP51CS	Sdg/Rept Nbr:	W05101	34659	Collection Date:	01/24/2007 09:56			
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Client Id:	NA	Matrix:	WATER	WATER	Sample On Date:				
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Moisture/Solids%*:		QC Type:	BS	Received Date:	01/24/2007			
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SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031458	SR-90	1.56E+01	pCi/L	2.5E+00		5.14E-01	70.3	1.37E+01	SRISO_SEP_P	1.0003E+00	02/22/2007			70	D
BS	10098-97-2			9.3E-01				113.7		L	07:46			130	

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\IV\Rad\W05101.Edd, h:\Reportdb\edd\Fead\IV\Rad\34659.Edd

Lab Sample Id: JNNPC1CS

Sdg/Rept Nbr: W05101 34659

Collection Date: 01/26/2007 09:01

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/26/2007

SAF Nbr Contract Nbr
MW6-SBB-A19981

Test User

Case Nbr

SAS Nbr

Suffix

Decant

Distilled Volume

File Id

FSuffix RTyp
CA H

Batch # / Qc Type	Analy/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031450	I-129L BS	9.43E+00 15046-84-1	pCi/L	1.2E+00 1.2E+00		4.52E-01	94.6	9.74E+00 96.8	I129LL_SEP_L	3.9513E+00 L	02/23/2007 05:09			70 130	D

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Feadl\V\Rad\W05101.Edd, h:\Reportdb\edd\Feadl\V\Rad\34659.Edd								
Lab Sample Id:	JNNPX1AS	Sdg/Rept Nbr:	W05101	34659		Collection Date:	01/25/2007 12:05								
Client Id:	NA	Matrix:	WATER	WATER		Sample On Date:									
Moisture/Solids%*:		QC Type:	BS			Received Date:	01/25/2007								
SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp	CB	H			
	MW6-SBB-A19981														
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031455 CO-60 BS 10198-40-0	3.42E+01	pCi/L	1.0E+01 1.0E+01		4.73E+00			3.88E+01 88.0	GAMMALL_GS	2.0001E+00 L	02/22/2007 06:58			70 130	D
7031455 CS-137 BS 10045-97-3	2.36E+01	pCi/L	7.6E+00 7.6E+00		4.99E+00			2.54E+01 93.1	GAMMALL_GS	2.0001E+00 L	02/22/2007 06:58			70 130	D
7031455 EU-152 BS 14683-23-9	8.45E+01	pCi/L	1.7E+01 1.7E+01		1.16E+01			7.63E+01 110.7	GAMMALL_GS	2.0001E+00 L	02/22/2007 06:58			70 130	D

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Feadl\V\Rad\W05101.Edd, h:\Reportdb\edd\Feadl\V\Rad\34659.Edd		
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Lab Sample Id:	JNNQK1CS	Sdg/Rept Nbr:	W05101	34659	Collection Date:	01/24/2007 12:16
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Client Id:	NA	Matrix:	WATER	WATER	Sample On Date:	
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Moisture/Solids%*:		QC Type:	BS	Received Date:	01/24/2007
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SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031465	ALPHA	2.06E+01	pCi/L	5.1E+00		6.64E-01	100.0	2.21E+01	9310_ALPHAB	2.039E-01	02/22/2007			70	D
BS	12587-46-1			2.0E+00				93.2		L	13:03			130	

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd

Lab Sample Id: JPGFT1CS

Sdg/Rept Nbr: W05101 34659

Collection Date: 01/24/2007 10:44

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 01/24/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	R Typ					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046186 BS	U-234 13966-29-5	8.60E+00	pCi/L	1.8E+00 1.1E+00		1.92E-01	89.3	8.59E+00 100.1	UISO_PLATE_	2.005E-01 L	02/20/2007 19:19			70 130	D
7046186 BS	U-235 15117-96-1	2.37E-01	pCi/L	1.8E-01 1.8E-01		1.62E-01	89.3	3.92E-01 60.6	UISO_PLATE_	2.005E-01 L	02/20/2007 19:19			70 130	D
7046186 BS	U-238 U-238	8.84E+00	pCi/L	1.8E+00 1.1E+00		1.62E-01	89.3	9.00E+00 98.3	UISO_PLATE_	2.005E-01 L	02/20/2007 19:19			70 130	D

Monday, March 12, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Fead\IV\Rad\W05101.Edd, h:\Reportdb\edd\Fead\IV\Rad\34659.Edd
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Lab Sample Id:	JPXHP1CS	Sdg/Rept Nbr:	W05101	34659	Collection Date:	01/24/2007 12:16
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Client Id:	NA	Matrix:	WATER	WATER	Sample On Date:	
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Moisture/Solids%*:		QC Type:	BS	Received Date:	01/24/2007
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SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7053500	BETA	1.93E+01	pCi/L	3.5E+00		2.66E+00	100.0	2.25E+01	9310_ALPHAB	2.01E-01	02/26/2007		70	D	
BS	12587-47-2			2.3E+00				85.7		L	14:10		130		

Monday, March 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05101.Edd, h:\Reportdb\edd\FeadIV\Rad\34659.Edd

Lab Sample Id: JM8281GR

Sdg/Rept Nbr: W05101 34659

Collection Date: 01/23/2007 12:56

Client Id: B1LP34

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 01/23/2007

SAF Nbr S07-001	Contract Nbr MW6-SBB-A19981	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS	R Typ
7031398	PU-238	0.00E+00	pCi/L	9.5E-02	U	2.23E-01	73.9		PUISO_PLATE	2.006E-01	02/14/2007	0.0	0.		D
DUP	13981-16-3	0.00E+00		9.5E-02						L	16:52	20.0	3		
7031398	PU-239	-9.29E-03	pCi/L	9.5E-02	U	2.23E-01	73.9		PUISO_PLATE	2.006E-01	02/14/2007	0.0	0.2		D
DUP	PU-239/240	-1.98E-02		9.5E-02						L	16:52	20.0	3		

Monday, March 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Fead\IV\Rad\W05101.Edd, h:\Reportdb\edd\Fead\IV\Rad\34659.Edd	
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Lab Sample Id:	JNC0N1HR	Sdg/Rept Nbr:	W05101	34659	Collection Date:	01/24/2007 12:16
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Client Id:	B1LPC9	Matrix:	WATER	WATER	Sample On Date:	
------------	--------	---------	-------	-------	-----------------	--

Moisture/Solids%*:		QC Type:	DUP	Received Date:	01/24/2007
--------------------	--	----------	-----	----------------	------------

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
S07-001	MW6-SBB-A19981								BA	H				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	Tracer MDC	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031465	ALPHA	2.24E+00	pCi/L	1.6E+00		2.02E+00	100.0	9310_ALPHAB	1.991E-01	02/22/2007	7.9	0.2		D
DUP	12587-46-1	2.42E+00		1.5E+00					L	11:33	20.0	3		

Monday, March 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadlV\Rad\W05101.Edd, h:\Reportdb\edd\FeadlV\Rad\34659.Edd

Lab Sample Id: JNC241DR

Sdg/Rept Nbr: W05101 34659

Collection Date: 01/24/2007 09:56

Client Id: B1LC85

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 01/24/2007

SAF Nbr S07-012	Contract Nbr MW6-SBB-A19981	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix BB	RTyp H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Tot/Cnt Unit	Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031458	SR-90	-1.69E-01	pCi/L	2.0E-01	U	4.83E-01	80.0		SRISO_SEP_P	1.0015E+00	02/22/2007 L	0.0	0.5		D
DUP	10098-97-2	-1.05E-01		1.9E-01							07:46	20.0	3		

Monday, March 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Fead\IV\Rad\W05101.Edd, h:\Reportdb\edd\Fead\IV\Rad\34659.Edd							
Lab Sample Id:	JNC411CR	Sdg/Rept Nbr:	W05101	34659		Collection Date:	01/24/2007 10:26							
Client Id:	B1LJD1	Matrix:	WATER	WATER		Sample On Date:								
Moisture/Solids%*:		QC Type:	DUP			Received Date:	01/24/2007							
SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
W07-012	MW6-SBB-A19981								BC	H				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Tot/Cnt Unit	Uncert 2S	Qu- al	Tracer MDC	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031399	TC-99	1.12E+02	pCi/L	1.4E+01		9.93E+00	100.0	TC99_ETVDSK	1.253E-01	02/13/2007	1.1	0.1		D
DUP	14133-76-7	1.13E+02		7.0E+00				L		11:31	20.0	3		

Monday, March 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name: h:\Reportdb\edd\Fead\IV\Rad\W05101.Edd, h:\Reportdb\edd\Fead\IV\Rad\34659.Edd									
Lab Sample Id:	JNCXW2ER	Sdg/Rept Nbr:	W05101	34659	Collection Date: 01/24/2007 10:44										
Client Id:	B1LD58	Matrix:	WATER	WATER	Sample On Date:										
Moisture/Solids%*:		QC Type:	DUP		Received Date: 01/24/2007										
SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp	BD	H			
S07-012	MW6-SBB-A19981														
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046186 U-234	9.86E+00	pCi/L	1.9E+00		2.08E-01	108.0		UIISO_PLATE_	1.991E-01	02/20/2007	4.4	0.3		D	
DUP 13966-29-5	1.03E+01		1.1E+00						L	19:19	20.0	3			
7046186 U-235	4.61E-01	pCi/L	2.6E-01		2.08E-01	108.0		UIISO_PLATE_	1.991E-01	02/20/2007	23.0	0.7		D	
DUP 15117-96-1	5.81E-01		2.4E-01						L	19:19	20.0	3			
7046186 U-238	1.43E+01	pCi/L	2.7E+00		2.61E-01	108.0		UIISO_PLATE_	1.991E-01	02/20/2007	4.5	0.3		D	
DUP U-238	1.37E+01		1.3E+00						L	19:19	20.0	3			

Monday, March 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\FeadlV\Rad\W05101.Edd, h:\Reportdb\edd\FeadlV\Rad\34659.Edd								
Lab Sample Id:	JNFTQ1GR	Sdg/Rept Nbr:	W05101	34659		Collection Date:	01/25/2007 12:05								
Client Id:	B1LJ46	Matrix:	WATER	WATER		Sample On Date:									
Moisture/Solids%*: SAF Nbr Contract Nbr Test User Case Nbr SAS Nbr Suffix Decant Distilled Volume File Id FSuffix RTyp W07-012 MW6-SBB-A19981						Received Date:	01/25/2007								
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031396	Uranium	2.46E+00	ug/L	2.5E-01		8.12E-02			UTOT_KPA	2.58E-02	02/28/2007	.5	0.1		D
DUP	7440-61-1	2.47E+00		2.5E-01						ML	10:42	20.0	3		

Monday, March 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd

Lab Sample Id: JNFTQ1HR

Sdg/Rept Nbr: W05101 34659

Collection Date: 01/25/2007 12:05

Client Id: B1LJ46

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 01/25/2007

SAF Nbr Contract Nbr
W07-012 MW6-SBB-A19981

Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
							BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031455 BE-7		8.12E+00	pCi/L	2.3E+01	U	4.39E+01			GAMMALL_GS	2.0075E+00	02/22/2007	13.6	0.1		D
DUP	13966-02-4	9.31E+00		2.3E+01					L	06:54		20.0	3		
7031455 CO-60		2.98E+00	pCi/L	2.7E+00	U	6.12E+00			GAMMALL_GS	2.0075E+00	02/22/2007	75.7	0.9		D
DUP	10198-40-0	1.34E+00		2.7E+00					L	06:54		20.0	3		
7031455 CS-134		-7.70E-01	pCi/L	2.3E+00	U	4.03E+00			GAMMALL_GS	2.0075E+00	02/22/2007	1995.9	1.1		D
DUP	13967-70-9	9.41E-01		2.3E+00					L	06:54		20.0	3		
7031455 CS-137		-1.90E+00	pCi/L	2.2E+00	U	3.62E+00			GAMMALL_GS	2.0075E+00	02/22/2007	0.0	1.2		D
DUP	10045-97-3	0.00E+00		2.2E+00					L	06:54		20.0	3		
7031455 EU-152		2.17E+00	pCi/L	5.0E+00	U	9.70E+00			GAMMALL_GS	2.0075E+00	02/22/2007	0.0	2.		D
DUP	14683-23-9	-5.14E+00		5.0E+00					L	06:54		20.0	3		
7031455 EU-154		-5.88E-01	pCi/L	6.8E+00	U	1.32E+01			GAMMALL_GS	2.0075E+00	02/22/2007	295.2	0.8		D
DUP	15585-10-1	3.06E+00		6.8E+00					L	06:54		20.0	3		
7031455 EU-155		5.15E-01	pCi/L	4.9E+00	U	8.54E+00			GAMMALL_GS	2.0075E+00	02/22/2007	2.0	0.		D
DUP	14391-16-3	5.25E-01		4.9E+00					L	06:54		20.0	3		
7031455 K-40		-4.50E+01	pCi/L	4.6E+01	U	9.87E+01			GAMMALL_GS	2.0075E+00	02/22/2007	0.0	0.6		D
DUP	13966-00-2	-2.61E+01		4.6E+01					L	06:54		20.0	3		
7031455 RU-106		-4.84E+00	pCi/L	2.0E+01	U	3.59E+01			GAMMALL_GS	2.0075E+00	02/22/2007	1038.2	0.9		D
DUP	13967-48-1	7.15E+00		2.0E+01					L	06:54		20.0	3		
7031455 SB-125		2.18E+00	pCi/L	6.4E+00	U	1.19E+01			GAMMALL_GS	2.0075E+00	02/22/2007	155.5	0.4		D
DUP	14234-35-6	2.74E-01		6.4E+00					L	06:54		20.0	3		

Monday, March 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Feadl\Rad\W05101.Edd, h:\Reportdb\edd\Feadl\Rad\34659.Edd								
Lab Sample Id:	JNFTQ2JR	Sdg/Rept Nbr:	W05101	34659		Collection Date:	01/25/2007 12:05								
Client Id:	B1LJ46	Matrix:	WATER	WATER		Sample On Date:									
Moisture/Solids%*:		QC Type:	DUP			Received Date:	01/25/2007								
SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-012	MW6-SBB-A19981								BH	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7053500	BETA	5.25E+02	pCi/L	6.9E+01		3.81E+00	100.0		9310_ALPHAB	1.551E-01	02/26/2007	15.1	1.5		D
DUP	12587-47-2	4.51E+02		1.2E+01					L	14:10	20.0	3			

Monday, March 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd

Lab Sample Id: JNK0D1ER

Sdg/Rept Nbr: W05101 34659

Collection Date: 01/26/2007 09:01

Client Id: B1L208

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 01/26/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
									BJ	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Tot/Cnt Unit	Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/
7031450	I-129L	2.39E+00	pCi/L	4.2E-01	U	7.44E-01	98.6		I129LL_SEP_L	3.922E+00
DUP	15046-84-1	1.85E+00		4.2E-01					L	02/22/2007 21:58
										25.8 20.0
										1.8 3
										D

Monday, March 12, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\FeadIV\Rad\W05101.Edd, h:\Reportdb\edd\FeadIV\Rad\34659.Edd							
Lab Sample Id:	JNKXW1ER	Sdg/Rept Nbr:	W05101	34659		Collection Date:	01/26/2007 12:55							
Client Id:	B1KR91	Matrix:	WATER	WATER		Sample On Date:								
Moisture/Solids%*:		QC Type:	DUP			Received Date:	01/26/2007							
SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
S07-010	MW6-SBB-A19981								BK	H				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	Tracer MDC	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031404	H-3	3.70E+01	pCi/L	1.5E+02	U	3.08E+02	100.0	906.0_H3_LSC	5.00E-03	02/11/2007	0.0	0.9		D
DUP	10028-17-8	-5.94E+01		1.3E+02				L		14:53	20.0	3		

Monday, March 12, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name:	h:\Reportdb\edd\Fead\Rad\W05101.Edd, h:\Reportdb\edd\Fead\Rad\34659.Edd							
Lab Sample Id:	JNFTQ1FW	Sdg/Rept Nbr:	W05101	34659		Collection Date:	01/25/2007 12:05							
Client Id:	B1LJ46	Matrix:	WATER	WATER		Sample On Date:								
Moisture/Solids%*:		QC Type:	MS			Received Date:	01/25/2007							
SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
W07-012	MW6-SBB-A19981								BE	H				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	Tracer MDC	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031396	Uranium	3.64E+01	ug/L	4.6E+00		8.28E-02	3.58E+01	UTOT_KPA	2.53E-02	02/28/2007			60	D
MS	7440-61-1			4.6E+00			101.7		ML	10:40			140	

Monday, March 12, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	VersionNbr:	05	File Name: h:\Reportdb\edd\FeadIV\Rad\W05101.Edd, h:\Reportdb\edd\FeadIV\Rad\34659.Edd									
Lab Sample Id:	JNK0D1DW	Sdg/Rept Nbr:	W05101	34659		Collection Date:	01/26/2007 09:01								
Client Id:	B1L208	Matrix:	WATER	WATER		Sample On Date:									
Moisture/Solids%*:		QC Type:	MS			Received Date:	01/26/2007								
SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix RTyp						
I07-009	MW6-SBB-A19981								Bl H						
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7031399	TC-99	3.81E+03	pCi/L	2.6E+02		9.92E+00	100.0	3.61E+03	TC99_ETVDSK	1.259E-01	02/13/2007			60	D
MS	14133-76-7			3.4E+01				105.4		L	11:31			140	

Lot No., Due Date: J7A230268; 03/09/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7031398; RPUISO Pulso by ALP
SDG, Matrix: W05101; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07 The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. Not Compared => JM8281AG PU-238 (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17 Tracer within Control Limits. OK	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK: No Action Level Found => PU-238 PU-239 OK: No Callin Level Found => PU-238 PU-239	Yes	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A

8.25 Counting Spectrum are within FWHM Limits. FWHM > maxFWHM => JNNG21AC PU-239 35.2>0 Q:V1	Yes	No	N/A
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. Library Not Specified => JM8281AD I:[NUC_LIBR]AR_PU Q: JM8281AG I:[NUC_LIBR]AR_PU Q: JNNG21AA I:[NUC_LIBR]AR_PU Q: JNNG21AC I:[NUC_LIBR]AR_PU Q:	Yes	No	N/A
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes	No	N/A

First Level Review Pam Anderson

Date 2-15-07

STL Richland

QAS_RADCALv4.8.26

STL RICHLAND

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**SEVERN
TRENT**

STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7031398

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result \leq the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity \leq the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?			
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Erika Jard

Date: 2/16/17

SEVERN
TRENT

STL

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

2/21/2007 2:48:32 PM

Lot No., Due Date: J7A250121; 03/09/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7046186; RUISO Uiso by ALP
SDG, Matrix: W05101; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch?

Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits?

Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A

3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units?

Yes No N/A

4.2 Were analysis volumes entered correctly?

Yes No N/A

4.3 Were Yields entered correctly?

Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A

4.5 Were raw counts reviewed for anomalies?

Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted?

Yes No N/A

5.2 Are all required forms filled out?

Yes No N/A

5.3 Was the correct methodology used?

Yes No N/A

5.4 Was transcription checked?

Yes No N/A

5.5 Were all calculations checked at a minimum frequency?

Yes No N/A

5.6 Are worksheet entries complete and correct?

Yes No N/A

6.0 Comments on any No response:

Reanalysis due to duplicate miss-match - NCM

Yes No N/A

First Level Review

Date

2/21/07

STL Richland

QAS_RADCALCv4.8.26

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STL RICHLAND

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**SEVERN
TRENT**

STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7046186
W02101

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?			
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

See NCM

Second Level Review

Sheryl R Adams

Date: 2/23/07

Clouseau Nonconformance Memo

SEVERN
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SERVICES

NCM #: **10-09467**
NCM Initiated By: Steven Wheland
Date Opened: 02/21/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Sep
Tests: **UAlso by ALP**
Lot #'s (Sample #'s): J7A250121 (1), J7B150000 (186),
QC Batches: 7046186

Nonconformance: Dups not within acceptance limits
Subcategory: Inhomogeneity of the Sample

Problem Description / Root Cause

Name	Date	Description
Steven Wheland	02/21/2007	Initial run of sample produced a duplicate that did not match the sample. Upon reanalysis with the caution of shaking the sample the duplicate matched the sample. This implies some sediment in the sample and the need for proper mixing prior to aliquanting.

Corrective Action

Name	Date	Corrective Action
Steven Wheland	02/21/2007	Report reanalysis data.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
		Response		Response Note	

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position
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Lot No., Due Date: J7A250129, J7A260178, J7A300174; 03/09/2007, 03/12/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7031465; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05101; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JNFRX1AA 111.40<200.00 JNKXW1AC 166.30<200.00 Q:VB	Yes	No	N/A
8.07 The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBLks) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPC)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17 Tracer within Control Limits. OK	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JNC0N1AC ALPHA 2.4E+00 L:2.2E+00 JNKXW1AC ALPHA 5.8E+00 L:2.0E+00	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	Yes	No	N/A
8.24 Result + 3s >= 0, Not Too Negative. OK	Yes	No	N/A

8.25 Counting Spectrum are within FWHM Limits.	Yes	No	N/A
No FWHM found in Batch Data!	<input checked="" type="checkbox"/>		
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used.	Yes	No	N/A
No Count Library found in Batch Data!	<input checked="" type="checkbox"/>		
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate.	Yes	No	N/A
OK	<input checked="" type="checkbox"/>		

First Level Review

Date 2/22/07

STL Richland

QAS_RADCALCv4.8.26

STL RICHLAND

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

OC Batch Number:

7031465
W05101

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result \leq the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity \leq the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other			
1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response:

Second Level Review:

Date: 2-23-07

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Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

2/27/2007 11:00:39 AM

Lot No., Due Date: J7A250129,J7A260178,J7A260181,J7A300174; 03/09/2007,03/12/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7053500; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05101; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JNFRX2AC 152.60<200.00 JNFTQ2AA 153.20<200.00 JNFT02:A 153.60<200.00 Q:VB	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBLks) found in Batch!	✓		
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPE)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	✓		
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	✓		
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	✓		
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JNC0N2AD BETA 3.3E+01 L:3.0E+00 JNC022:D BETA 9.4E+00 L:2.8E+00 JNC092:AD BETA 1.6E+01 L:2.8E+00 JNFRX2AC BETA 1.1E+01 L:3.7E+00 JNFTQ2AA BETA 4.5E+02 L:3.8E+00 JNFT02:A BETA 5.2E+02 L:3.7E+00 JNKXW:AD BETA 1.1E+01 L:2.9E+00	✓		
8.23 Result < = Action Level, when Defined. OK; No Action Level Found => BETA	✓		

OK; No Callin Level Found => BETA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.24 Result + 3s >=0, Not Too Negative.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.25 Counting Spectrum are within FWHM Limits.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No FWHM found in Batch Data!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.26 Instruments have Current Calibrations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.27 Correct Count Library Used.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Count Library found in Batch Data!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

First Level Review

STL Richland

QAS_RADCALCv4.8.26

STL RICHLAND

Date 2/27/07

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Data Review Checklist
RADIOCHEMISTRY
Second Level Review

OC Batch Number:

7053500
W05101

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result \leq the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity \leq the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

See NCM

Second Level Review

Darryl A. Olson

Date: 2-27-07

Clouseau Nonconformance Memo

SEVERN
TRENT
SERVICES

NCM #: **10-09488**

NCM Initiated By: Lisa Antonson

Date Opened: 02/27/2007

Date Closed:

Classification: **Deficiency**

Status: **GLREVIEW**

Production Area: Environmental - Prep

Tests: Beta by GPC-Sr/Y

Lot #'s (Sample #'s): J7A250129 (1,2,3),
J7A260178 (1), J7A260181
(1,2), J7A300174 (1),
J7A310000 (464),

QC Batches: 7031464

Nonconformance: QC Result Out of Limits

Subcategory: Analyte was recovered low in the LCS

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	02/27/2007	The original Beta batch has an LCS with a recovery of 17%. The batch was rerun as 7053500 and has acceptable results.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	02/27/2007	Will continue to monitor performance.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
		Response	Response Note		

Quality Assurance Verification

Verified By	Due Date	Status	Notes
This section not yet completed by QA.			

Approval History

Date Approved	Approved By	Position
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SEVERN
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Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

2/27/2007 12:41:18 PM

Lot No., Due Date: J7A230268,J7A250129,J7A250138; 03/09/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7031458; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W05101; WATER

1.0 COC

1.1 Is the ICC C page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch?

Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits?

Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A

3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units?

Yes No N/A

4.2 Were analysis volumes entered correctly?

Yes No N/A

4.3 Were Yields entered correctly?

Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A

4.5 Were raw counts reviewed for anomalies?

Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted?

Yes No N/A

5.2 Are all required forms filled out?

Yes No N/A

5.3 Was the correct methodology used?

Yes No N/A

5.4 Was transcription checked?

Yes No N/A

5.5 Were all calculations checked at a minimum frequency?

Yes No N/A

5.6 Are worksheet entries complete and correct?

Yes No N/A

6.0 Comments on any No response:

Yes No N/A

First Level Review

Kyle Auterson

Date

2/27/07

STL Richland

QAS_RADCAL(v4.8.26)

STL RICHLAND

Moll Zarecky

2-27-07

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**SEVERN
TRENT**

STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

OC Batch Number: 7031458
W05101

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result \leq the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result $<$ the Contract Detection Limit?	/		
4. Is the blank result $>$ the Contract Detection Limit but the sample result $<$ the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity \leq the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?		/	
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other			
1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response:

Second Level Review:

Daryl A. Olsen

Date: 2-28-07

Lot No., Due Date: J7A230268,J7A250129,J7A250138,J7A260181; 03/09/2007,03/12/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7031455; RGAMMA Gamma by GER

SDG, Matrix: W05101; WATER

1.0 COC

1.1 Is the ICOOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch?

Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits?

Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A

3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units?

Yes No N/A

4.2 Were analysis volumes entered correctly?

Yes No N/A

4.3 Were Yields entered correctly?

Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A

4.5 Were raw counts reviewed for anomalies?

Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted?

Yes No N/A

5.2 Are all required forms filled out?

Yes No N/A

5.3 Was the correct methodology used?

Yes No N/A

5.4 Was transcription checked?

Yes No N/A

5.5 Were all calculations checked at a minimum frequency?

Yes No N/A

5.6 Are worksheet entries complete and correct?

Yes No N/A

6.0 Comments on any No response:

Yes No N/A

Blank/LCS switch - NCM

First Level Review

Date

2/22/07

SEVERN
TRENT

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Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7031455

W05101

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?		/	
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?		/	
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other			
1. Are all Nonconformances included and noted?	/		
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?			
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response:

See NCR

Second Level Review:

Sherry A. Adam

Date: 2-25-07

Clouseau Nonconformance Memo

SEVERN
TRENT
SERVICES

NCM #: **10-09471**

NCM Initiated By: Steven Wheland

Date Opened: 02/22/2007

Date Closed:

Classification: **Deficiency**

Status: **GLREVIEW**

Production Area: Environmental - Prep

Tests: Gamma by GER

Lot #'s (Sample #'s): J7A230268 (2), J7A250129
(1,2,3), J7A250138 (2),
J7A260181 (1,2), J7A310000
(455),

QC Batches: 7031455

Nonconformance: Technician Error

Subcategory: LCS/Blank Switch

Problem Description / Root Cause

Name	Date	Description
Steven Wheland	02/22/2007	Blank/ LCS switch. The blank calculated to produce an acceptable LCS yields for each of the three isotopes.

Corrective Action

Name	Date	Corrective Action
Steven Wheland	02/22/2007	report results.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
	Response	Response Note			

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position
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Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

2/23/2007 9:49:11 AM

Lot No., Due Date: J7A230268,J7A230278,J7A250129,J7A250163,J7A260157,J7A300180; 03/09/2007,03/12/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7031450; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05101; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch?

Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits?

Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A

3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units?

Yes No N/A

4.2 Were analysis volumes entered correctly?

Yes No N/A

4.3 Were Yields entered correctly?

Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A

4.5 Were raw counts reviewed for anomalies?

Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted?

Yes No N/A

5.2 Are all required forms filled out?

Yes No N/A

5.3 Was the correct methodology used?

Yes No N/A

5.4 Was transcription checked?

Yes No N/A

5.5 Were all calculations checked at a minimum frequency?

Yes No N/A

5.6 Are worksheet entries complete and correct?

Yes No N/A

6.0 Comments on any No response:

First Level Review

STL Richland

QAS_RADCALCV4.8.26

STL RICHLAND

Date

2/23/07

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**SEVERN
TRENT**

STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7031450

W03101

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?			
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?			
C. Other			
1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response:

Second Level Review:

Therrell A. Adam

Date: 2-23-07

Lot No., Due Date: J7A230268,J7A250148,J7A250121,J7A260181,J7A300180; 03/09/2007,03/12/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7031399; RTC99 Tc-99 by LSC

SDG, Matrix: W05101; WATER

8.0 Correction Calculation Protocol Used.	OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples	OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units	OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method	OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples	Incorrect Tracer/Vial => JNK0D1AD TCSG<>TCSE Q:V9	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample	OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used	OK	Yes	No	N/A
8.07 The Correct Count Geometry was Used.	OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	OK	Yes	No	N/A
8.09 Method Blank is within Control Limits.	OK	Yes	No	N/A
8.1 Comments:				
8.11 Matrix Blank is within Control Limits.	No Matrix Blanks (MBLks) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary).	OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits.	OK (RPD)	Yes	No	N/A
8.14 LCS within Control Limits.	OK	Yes	No	N/A
8.15 MLCS within Control Limits.	No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits.	OK	Yes	No	N/A
8.17 Tracer within Control Limits.	No Tracers found in Batch!	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples)	No Tracers found in Batch!	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL.	OK	Yes	No	N/A
8.2 Comments:				
8.21 Result < Lc, Activity Not Detected, U Flag.	No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag.	No Positive Results OK Calc_IDL Not Calculated	Yes	No	N/A
8.23 Result <= Action Level, when Defined.	OK: No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	Yes	No	N/A
8.24 Result + 3s >=0, Not Too Negative.	OK	Yes	No	N/A
8.25 Counting Spectrum are within FWHM Limits.	No FWHM found in Batch Data!	Yes	No	N/A

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes	No	N/A



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7031399

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result \leq the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result $<$ the Contract Detection Limit?	✓		
4. Is the blank result $>$ the Contract Detection Limit but the sample result $<$ the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity \leq the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			✓
1. Are all Nonconformances included and noted?			
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review

Erika Jord

Date: 2/15/17

Lot No., Due Date: J7A230268,J7A250129,J7A300174; 03/09/2007,03/12/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7031404; RTRITIUM H-3 by LSC

SDG, Matrix: W05101; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JM8241AA 5.00<10.00 JNC0N1AA 5.00<10.00 JNC021AA 5.00<10.00 JNC091AA 5.00<10.00 JNKXW1AA 5.00<10.00 Q:VB <i>OK PA 2/12/07</i>			✓
8.07 The Correct Count Geometry was Used. Count Geometry => JNNHL1AF SVP15/5<>SVP10/10 JNNHL1AA SVP15/5<>SVP10/10 JNNHL1AC SVP15/5<>SVP10/10 JNNHL1AD SVP15/5<>SVP10/10 JNNHL1AE SVP15/5<>SVP10/10 JM8241AA SVP15/5<>SVP10/10 JNC0N1AA SVP15/5<>SVP10/10 JNC021AA SVP15/5<>SVP10/10 JNC091AA SVP15/5<>SVP10/10 JNKXW1AA SVP15/5<>SVP10/10 JNKXW1AE SVP15/5<>SVP10/10 Q:VC <i>OK DA 2/12/07</i>		✓	
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	✓		
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. OK	✓		
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	✓		

8.22 Result < Mdc, Activity Not Detected, U Flag.	Yes	No	N/A
No Positive Results	✓		
OK Calc_IDL Not Calculated			
8.23 Result <= Action Level, when Defined.	Yes	No	N/A
OK; No Action Level Found => H-3	✓		
OK; No Callin Level Found => H-3			
8.24 Result + 3s >=0, Not Too Negative.	Yes	No	N/A
OK	✓		
8.25 Counting Spectrum are within FWHM Limits.	Yes	No	N/A
No FWHM found in Batch Data!			✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used.	Yes	No	N/A
No Count Library found in Batch Data!			✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate.	Yes	No	N/A
OK	✓		

First Level Review

Pam Anderson

Date *2/12/07*

STL Richland

OAS_RADCALCv4.8.26

STL RICHLAND

Page 2



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7031404
W05101

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review

Date: 2-12-07

SEVERN
TRENT

STL

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

2/28/2007 4:39:04 PM

Lot No., Due Date: J7A250121,J7A260181; 03/09/2007,03/12/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7031396; RUNAT UNat by KPA

SDG, Matrix: W05101; WATER

1.0 COC

1.1 Is the ICC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A **2.0 QC Batch**

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A

2.2 Are the GC appropriate for the analysis included in the batch?

Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A **3.0 QC & Samples**

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A

3.3 Are the MS/MSD results, yields, and MDAs within contract limits?

Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A

3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A **4.0 Raw Data**

4.1 Were results calculated in the correct units?

Yes No N/A

4.2 Were analysis volumes entered correctly?

Yes No N/A

4.3 Were Yields entered correctly?

Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A

4.5 Were raw counts reviewed for anomalies?

Yes No N/A **5.0 Other**

5.1 Are all nonconformances included and noted?

Yes No N/A

5.2 Are all required forms filled out?

Yes No N/A

5.3 Was the correct methodology used?

Yes No N/A

5.4 Was transcription checked?

Yes No N/A

5.5 Were all calculations checked at a minimum frequency?

Yes No N/A

5.6 Are worksheet entries complete and correct?

Yes No N/A

6.0 Comments on any No response:

First Level Review

Date 2/28/07

STL Richland

QAS_RADCALC:v4.8.26

STL RICHLAND

Page 1

**SEVERN
TRENT**

STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7031396
W02101

Review Item	Yes (✓)	No (✗)	N/A (✗)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?	✓		
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sheryl R Adam

Date: 3-1-07

PNNL J7AZ30268
W05101
~~Exhibit A~~ due 03-09-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-001-366

Page 1 of 1

Collector: CONNOLLY	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. S07-001	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV JANUARY 2007	HNF-N-S06 2	Ice Chest No.	GWO 06-11	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

Jm 824

Relinquished By Fluor Hanford D. P. CONNOLLY	Print <i>DB</i>	Sign	Date/Time 1403	Received By <i>S. Smith S. Smith</i>	Print	Sign	Date/Time 1403	Matrix *
JAN 23 2007	JAN 23 2007							
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By			Date/Time	

PNNL JTA230268 SS W05105 W05101 Due 03-09-07		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			C.O.C. # S07-001-346
					Page 1 of 1
Collector D. P. CONNOLY	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX	
SAF No. S07-001	Sampling Origin Hanford Site	Purchase Order/Charge Code			
Project Title SURV_JANUARY 2007	HNFAN-5062	Ice Chest No. 8W0-06-11	Temp.		
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.			
Protocol SURV	Priority: 45 Days	Offsite Property No.			
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Relinquished By Fluor Hanford D.P. CONNOLLY			Date/Time JAN 23 2007	Received By J. Johnson S. Smith	Date/Time JAN 23 2007	Matrix *	
						S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By	Date/Time		
Relinquished By			Date/Time	Received By	Date/Time		
Relinquished By			Date/Time	Received By	Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By	Date/Time	



STL

Sample Check-in List

Date/Time Received: 01-23-07 1405Client: P6WSDG #: W05101 NA SAF #: SC7-001 NA Work Order Number: JTA230268Chain of Custody #: SC7-001-366, 346

Shipping Container ID:

Air Bill # _____

1. Custody Seals on shipping container intact? Yes No
2. Custody Seals dated and signed? Yes No
3. Chain of Custody record present? Yes No
4. Cooler temperature: NA 5 Vermiculite/packing materials is Yes No
5. Number of samples in shipping container: 2
6. Sample holding times exceeded? Yes No
7. Samples have:
 tape
 custody seals hazard labels
 appropriate samples labels
8. Samples are:
 in good condition
 broken leaking
 have air bubbles
(Only for samples requiring head space)
9. Sample pH taken? NA pH<2 pH>2 pH>9
10. Sample Location, Sample Collector Listed? * Yes No
*For documentation only. No corrective action needed.
11. Were any anomalies identified in sample receipt? Yes No
12. Description of anomalies (include sample numbers): _____

Sample Custodian: A. SmithDate: 01-23-07 1405

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary, process as is.

Project Manager _____

Date _____

PNNL JIAZ30278
W05101
due 03-09

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-012-520

Page 1 of 1

Collector Fluor Hanford K. B. HULSE	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. S07-012	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV. DECEMBER 2006	HNF - N - 506-4	Ice Chest No. TJ. - C	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

1405

Relinquished By Fluor Hanford K.B. HULSE	Print <i>K.B. Hulse JAN 23 2007</i>	Sign	Date/Time	Received By <i>S. Smith</i>	Print <i>S. Smith</i>	Sign	Date/Time	1405 /405	Matrix *
Relinquished By		Date/Time		Received By			Date/Time		
Relinquished By		Date/Time		Received By			Date/Time		
Relinquished By		Date/Time		Received By			Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By			Date/Time	

RECEIVING STL

Sample Check-in List

Date/Time Received: 01.23.07 1405

Client: P&W

SDG# 1405101NA SAF# 807-012 NA#

Work Order Number: STL-230278 Chain of Custody # SDP-012-520

Shipping Container ID: _____ Air Bill #: _____

1. Custody Seals on shipping container intact? NA Yes No

2. Custody Seals dated and signed? NA

3. Chain of Custody record present? NA Yes No

4. Cooler temperature? NA Yes No

5. Number of samples in shipping container? 1 Yes No

7. Sample holding times exceeded? NA Yes No

8. Samples have:

tape hazard labels

custody seals appropriate samples labels

9. Samples are:

in good condition leaking

broken have air bubbles

10. Sample pH taken? NA pH<2 pH>2 pH=2 (Only for samples requiring head space)

11. Sample Location, Sample Collector Listed? *

*For documentation only. No corrective action needed Yes No

12. Were any anomalies identified in sample receipt? Yes No

13. Description of anomalies (include sample numbers):

Sample Custodian: J. Smith Date: 07.23.07 1405

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on: _____ by _____ Person contacted: _____

{ } No action necessary; process as is.

Project Manager: _____ Date: _____

L.S. (PL) 9/03, Rev. 5

PNNL JTAZ50121
W05701
Due 03.09.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #	S07-012-616		
Page	1	of	1

Collector F. M. HALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. S07-012	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV, DECEMBER 2006	HNF - N - 506 3	Ice Chest No.	R051	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

JNCKW

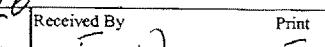
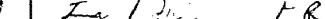
Relinquished By Fluor Hanford F.M. HALL	Print 	Sign 	Date/Time 1220	Received By Eric Darby	Print 	Sign 	Date/Time 1220	JAN 24 2007	Matrix *
Relinquished By	Date/Time			Received By	Date/Time				S = Soil DS = Drum Solid
									SE = Sediment DL = Drum Liquid
									SO = Solid T = Tissue
									SI = Sludge WI = Wine
									W = Water LI = Liquid
									O = Oil V = Vegetation
									A = Air X = Other
Relinquished By	Date/Time			Received By	Date/Time				
Relinquished By	Date/Time			Received By	Date/Time				
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time	

PNNL JTA250121
W05701
Due 03-09-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-012-624

Page 1 of 1

Relinquished By Fluor Hanford	Print 	Sign JAN 24 2007	Date/Time 1120	Received By 	Print Eric Dunley	Sign JAN 24 2007	Date/Time 1220	Matrix *
Relinquished By E. M. HALL			Date/Time	Received By 			Date/Time	S = Soil DS = Drum Solid SF = Sediment DL = Drum Liquid SO = Solid T = Tissue SI = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time	

STL

Sample Check-in List

Date/Time Received: 1/24/07 12:25

Client: PNL PGW SDG #: W05701 NA SAF #: SO7-012 NA

Work Order Number: J7A250121 Chain of Custody #: SO7-012-616,624

Shipping Container ID: _____ Air Bill #: _____

1. Custody Seals on shipping container intact? NA Yes No
2. Custody Seals dated and signed? NA Yes No
3. Chain of Custody record present? NA Yes No
4. Cooler temperature: NA 5. Vermiculite/packing materials is NA Wet Dry
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 - tape
 - custody seals
 - hazard labels
 - appropriate samples labels
9. Samples are:
 - in good condition
 - broken
 - leaking
 - have air bubbles(Only for samples requiring head space)
10. Sample pH taken? NA pH<2 pH>2 pH>9
11. Sample Location, Sample Collector Listed? * *For documentation only. No corrective action needed. Yes No
12. Were any anomalies identified in sample receipt? Yes No
13. Description of anomalies (include sample numbers). _____

Sample Custodian	<u>Eric Darby</u>	Date:	<u>1/24/07 12:20</u>
Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary: process as is.

Project Manager _____ Date _____

PNNL JTA250129 W05101 Due 03-09-07	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			C.O.C. # S07-001-268
				Page 1 of 1
Collector Fluor Hanford	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. D.P. CONNOLLY S07-001	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV. JANUARY 2007	HNF-W-5062	Ice Chest No. SAWS-115	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No

JNCON

Relinquished By Fluor Hanford D.P. CONNOLY	Print 	Sign	Date/Time 1330	Received By Eric Daily	Print 	Sign	Date/Time 1330	Matrix *
Relinquished By			JAN 24 2007	Received By			JAN 24 2007	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By		Date/Time	

PNNL J7A250129
W05101
Due 03-09-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-001-238

Page 1 of 1

Collector Fluor Hanford D. P. CONNOLLY	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. S07-001	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV, JANUARY 2007	HNF-N-5062	Ice Chest No. SAUS-115	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

JNC02

Relinquished By Fluor Hanford D. E. CINNOLLY	Print 	Sign 	Date/Time 1334	Received By Eric Darby	Print 	Sign 	Date/Time 1334	Matrix *
Relinquished By			Date/Time JAN 24 2007	Received By Eric Darby			Date/Time JAN 24 2007	S = Soil SE = Sediment SO = Solid SI = Sludge W = Water O = Oil A = Air
Relinquished By			Date/Time	Received By			Date/Time	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time	

Matrix *	
S	= Soil
SE	= Sediment
SO	= Solid
SL	= Sludge
W	= Water
O	= Oil
A	= Air
DS	= Drum Solid
DL	= Drum Liquid
T	= Tissue
WI	= Wine
L	= Liquid
V	= Vegetation
X	= Other

STL RICHARD

PNNL JTA250129
W05701
River Hartford Due 01

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C

S07-001-244

Page 1 of 1

JNCO9

Relinquished By Fluor Hanford D. P. CONNOLLY	Print 	Sign	Date/Time JAN 24 2007	Received By Ex-Duly	Print	Sign	Date/Time JAN 24 2007	Matrix *
Relinquished By			Date/Time	Received By			Date/Time	S = Soil DS = Drum Solid SF = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By		Date/Time	

STANDARD
GARDEN STL

Sample Check-in List

Date/Time Received: 1/24/07 1330

Client: PNC

SDG #: W05701 NA SAF #: S07-001 NA

Work Order Number: J7A250129

Chain of Custody #: S07-001, 268, 238, 244

Shipping Container ID:

Air Bill #

1. Custody Seals on shipping container intact? NA Yes No
2. Custody Seals dated and signed? NA Yes No
3. Chain of Custody record present? NA Yes No
4. Cooler temperature: NA ✓ 5. Vermiculite/packing materials is NA Wet Dry
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 - tape
 - custody seals
 - hazard labels
 - appropriate samples labels
9. Samples are:
 - in good condition
 - broken
 - leaking
 - have air bubbles(Only for samples requiring head space)
10. Sample pH taken? NA pH<2 pH>2 pH>9
11. Sample Location, Sample Collector Listed? * Yes No
 - *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes No
13. Description of anomalies (include sample numbers).

Sample Custodian:

Eve Darby

Date:

1/24/07 1330

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary, process as is.

Project Manager _____

Date _____

PNNL JTAZ50138
W05701

RECORDED AND INDEXED AUG 03-09-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

G.O.G.

S07-012-612

Page 1 of 1

Collector M.R. WEIL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. S07-012	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV DECEMBER 2006	HNF-N-506-1	Ice Chest No.	118	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Relinquished By
FLUOR HANFORD
M.R. WEIL ✓

Print _____ Sign _____

1

Date/Time 13:34

Received R

Print

Sig

Date/Time

Matrix *

Relinquished By

Date/Tim

Date/Tim

S	=	Soil	DS	=	Drum Solid
SE	=	Sediment	DL	=	Drum Liquid
SO	=	Solid	T	=	Tissue
SL	=	Sludge	WI	=	Wine
W	=	Water	L	=	Liquid
O	=	Oil	V	=	Vegetation
A	=	Air	Y	=	Other

THE BOSTONIAN SOCIETY

Büro für
R&D

Part II

Date/Time

FINAL SAMPLE DISPOSITION

Disposal Method (e.g., Return to customer, per lab procedure, used in process)

Disposed By

Date/Time

Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
JAN 24 2007			Erin Dally ER2 Dally JAN 24 2007				
Relinquished By	Date/Time	Received By			Date/Time	S = Soil	DS = Drum Solid
						SE = Sediment	DL = Drum Liquid
Relinquished By	Date/Time	Received By			Date/Time	SO = Solid	T = Tissue
						SL = Sludge	WI = Wine
Relinquished By	Date/Time	Received By			Date/Time	W = Water	L = Liquid
						O = Oil	V = Vegetation
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By		Date/Time	

卷之三

PNNL 07A250138
WOS-101

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-012-600

Page 1 of 1

Collector M.R. WEIL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. S07-012	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV. DECEMBER 2006	<i>HNF-N-506-1</i>	Ice Chest No.	<i>005</i>	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

FIRMAN HANFORD
MUSIC BY
M.R. WEIL

Sign

1

JAN 24 2007 Date/Time 330

Received By

P

51

Data/Tim

Date/Tim

Page 1

Relinquished By

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

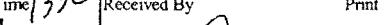
**FINAL SAMPLE
DISPOSITION**

Disposal Method (e.g. Return to customer, per lab procedure, used in process)

Disposed By

Date/Time

PNNI JIA250138 W05101 Due 03-09-07		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # S07-012-596
				Page <u>1</u> of <u>1</u>
Collector M.R. WEIL	Contact/Requester Dot Stewart	Telephone No. <u>509-376-5056</u>	MSIN	FAX
SAF No. <u>S07-012</u>	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV. DECEMBER 2006	<u>HNF-N-506-1</u>	Ice Chest No.	<u>005</u> Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Print		Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
M.R. WEIL			JAN 24 2007				JAN 24 2007	S = Soil DS = Drum Solid SF = Sediment DL = Drum Linin SO = Solid T = Tissue SI = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By		Date/Time	Received By			Date/Time		
Relinquished By		Date/Time	Received By			Date/Time		
Relinquished By		Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By	Date/Time		

STL RICHLAND STL

Sample Check-in List

Date/Time Received: 1/24/07 1330

Client: PNL

SDG #: W05107 NA SAF #: 507-012 NA

Work Order Number: JTA250138

Chain of Custody #: 507-012, 596, 600, 604, 612

Shipping Container ID:

Air Bill #

1. Custody Seals on shipping container intact? Yes No
2. Custody Seals dated and signed? Yes No
3. Chain of Custody record present? Yes No
4. Cooler temperature: NA 5. Vermiculite/packing materials is NA Wet Dry
6. Number of samples in shipping container: 4
7. Sample holding times exceeded? Yes No
8. Samples have:
 - tape
 - custody seals
 - hazard labels
 - appropriate samples labels
9. Samples are:
 - in good condition
 - broken
 - leaking
 - have air bubbles

(Only for samples requiring head space)
10. Sample pH taken? pH<2 pH>2 pH>9
11. Sample Location, Sample Collector Listed? * Yes No
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes No
13. Description of anomalies (include sample numbers).

Sample Custodian:

Erin Darby

Date: 1/24/07 1330

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary; process as is.

Project Manager _____

Date _____

LS-023, 9/03, Rev. 5

S PNNL JTA250148 W05101 Due 03-09-07		C.O.C. # W07-012-388	
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
		Page 1 of 1	
Collector E PARCHEN	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN FAX
SAF No. W07-012	Sampling Origin Hanford Site	Purchase Order/Charge Code	
Project Title RCRA DECEMBER 2006	HNF - N - 506 - 4	Ice Chest No. → J - Z	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.	
Protocol RCRA	Priority: 45 Days	Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.	

Relinquished By J. E. PARCHEN	Print <i>[Signature]</i>	Sign	Date/Time 1515	Received By <i>E. Dally</i>	Print <i>[Signature]</i>	Sign	Date/Time 1515	Matrix *
Relinquished By	JAN 24 2007 Date/Time			Received By	E. Dally JAN 24 2007 Date/Time			S = Soil DS = Drum Solid SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SI = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By				Received By				
Relinquished By				Received By				
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time	



STL

Sample Check-in List

Date/Time Received: 1/24/07 1515Client: PNL SDG #: W05101 NA [] SAF #: W07-012 NA []Work Order Number: JTA250148 Chain of Custody #: W07-012-388

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes [] No []
2. Custody Seals dated and signed? NA [] Yes [] No []
3. Chain of Custody record present? NA [] Yes [] No []
4. Cooler temperature: NA [] ✓ 5. Vermiculite/packing materials is NA [] Wet [] Dry []
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [] Yes [] No []
8. Samples have:
 tape
 custody seals
 hazard labels
 appropriate samples labels
9. Samples are:
 in good condition
 broken
 leaking
 have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA [] pH<2 [] pH>2 [] pH>9 []
11. Sample Location, Sample Collector Listed? *
 *For documentation only. No corrective action needed. Yes [] No []
12. Were any anomalies identified in sample receipt? Yes [] No []
13. Description of anomalies (include sample numbers). _____

Sample Custodian:	<u>Eric Ruby</u>	Date:	<u>1/24/07 1515</u>
Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary, process as is.

Project Manager _____ Date _____

LS-023 9/03, Rev 5

PNNL JTAZ 50163
W05701 due

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.

107-021-7

Page 1 of 1

Collector J. PARCHEN	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. I07-021	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title 2ZP1-LOL JANUARY 2007	HNF - N - 506 - 4	Ice Chest No.	TJ-2	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol CERCLA	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

JNC7u

RELINQUISHER			Print	Sign	Date/Time	1515	Received By	Print	Sign	Date/Time	1515	Matrix *		
<i>Jerry</i>			<i>JAN 24 2007</i>			<i>Eric Drey</i>			<i>JAN 24 2007</i>			S = Soil SF = Sediment SO = Solid SI = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Lionid V = Vegetation X = Other	
Relinquished By			Date/Time			Received By			Date/Time					
Relinquished By			Date/Time			Received By			Date/Time					
Relinquished By			Date/Time			Received By			Date/Time					
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)					Disposed By			Date/Time				



STL

Sample Check-in List

Date/Time Received: 1/24/07 1315
 Client: PNL SDG #: W05701 NA SAF #: I07-021 NA
 Work Order Number: JTA250163

- Shipping Container ID: _____ Air Bill #: _____
- 1 Custody Seals on shipping container intact? NA Yes No
 - 2 Custody Seals dated and signed? NA Yes No
 - 3 Chain of Custody record present? NA Yes No
 - 4 Cooler temperature: NA 5 Vermiculite/packing materials is NA Wet Dry
 - 5 Number of samples in shipping container: 1
 - 6 Sample holding times exceeded? NA Yes No
 - 7 Samples have:
 - tape
 - custody seals
 - hazard labels
 - appropriate samples labels
 - 8 Samples are:
 - in good condition
 - broken
 - leaking
 - have air bubbles

(Only for samples requiring head space)
 - 9 Sample pH taken? NA pH<2 pH>2 pH>9
 - 10 Sample Location, Sample Collector Listed? * Yes No
*For documentation only. No corrective action needed.
 - 11 Were any anomalies identified in sample receipt? Yes No
 - 12 Description of anomalies (include sample numbers) _____

Sample Custodian:

Eric Daley

Date:

1/24/07 1515

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary, process as is.

Project Manager _____ Date _____

STL RICHLAND

PNNL JIA260157
WOS101
due 03-12-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C

S07-001-138

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. S07-001	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV, JANUARY 2007	HNF - T - 506 - 4	Ice Chest No.	TJ - 2	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.	Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

JNFMN

Relinquished By PAUL Hanford D.E. PARCHEN	Print <i>D. E. Parchen</i>	Sign <i>[Signature]</i>	Date/Time, YR JAN 25 2007	Received By <i>Eric Denby</i>	Print <i>Eric Denby</i>	Sign <i>[Signature]</i>	Date/Time 1450	Matrix *
Relinquished By			Date/Time	Received By		Date/Time		S = Soil DS = Drum Solid SF = Sediment DL = Drum Lomi SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Limid O = Oil V = Vegetation A = Air X = Other
Relinquished By			Date/Time	Received By		Date/Time		
Relinquished By			Date/Time	Received By		Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By			Date/Time	

~~STL RICHLAND~~

STL

Sample Check-in List

Date/Time Received: 1/25/07 1450

Client: PWL SDG #: W05101 NA SAF #: 807-001 NA

Work Order Number: JTA260157 Chain of Custody #: 807-001-138

Shipping Container ID: _____ Air Bill #: _____

1. Custody Seals on shipping container intact? NA Yes No
2. Custody Seals dated and signed? NA Yes No
3. Chain of Custody record present? NA Yes No
4. Cooler temperature? NA S. Vermiculite/packing materials is NA Wet Dry
5. Number of samples in shipping container: 1
6. Sample holding times exceeded? NA Yes No
7. Samples have:
 - tape
 - custody seals
 - hazard labels
 - appropriate samples labels
8. Samples are:
 - in good condition
 - broken
 - leaking
 - have air bubbles

(Only for samples requiring head space)
9. Sample pH taken? NA pH<2 pH>2 pH>9
10. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.
11. Were any anomalies identified in sample receipt? Yes No
12. Description of anomalies (include sample numbers).

Sample Custodian:

Eric Darby

Date:

Jan 25/07 1450

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary, process as is.

Project Manager _____ Date _____

LS-023 9/03, Rev. 5

PNNL

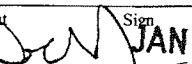
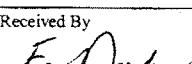
JTA260178
W05701
Due 03-12-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.

W07-001-53

Page 1 of 1

Relinquished By Fluor Hanford D. E. PARCHEN	Print 	Sign JAN 25 2007 1450	Date/Time	Received By Eric Darby	Print 	Sign JAN 25 2007 1450	Date/Time	Matrix *
Relinquished By		Date/Time	Received By			Date/Time	S = Soil SE = Sediment SO = Solid SI = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By		Date/Time	Received By			Date/Time		
Relinquished By		Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time	



STL

Sample Check-in List

Date/Time Received: 01-25-07Client: Dow SDG #: W05101 NA SAF #: W07-001 NA Work Order Number: JIAZ60178 Chain of Custody #: W07-001-53

Shipping Container ID: _____ Air Bill #: _____

1. Custody Seals on shipping container intact? Yes No
2. Custody Seals dated and signed? Yes No
3. Chain of Custody record present? Yes No
4. Cooler temperature: NA 5. Vermiculite/packing materials is NA Wet Dry
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? Yes No
8. Samples have:
 - tape
 - custody seals
 - hazard labels
 - appropriate samples labels
9. Samples are:
 - in good condition
 - broken
 - leaking
 - have air bubbles(Only for samples requiring head space)
10. Sample pH taken? pH<2 pH>2 pH>9
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes No
12. Were any anomalies identified in sample receipt? Yes No
13. Description of anomalies (include sample numbers): _____

Sample Custodian: EP En DaleyDate: 01-25-07 1450

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

 No action necessary; process as is.

Project Manager _____ Date _____

STL RICHLAND

PNNL/JTA260181
W05101
Due 03-12-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.

W07-012-113

Page 1 of 1

Relinquished By Fluor Hanford D. E. PARCHEN	Date/Time JAN 25 2007 1450	Received By In Daily Eric Donley	Date/Time JAN 25 2007 1450	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	S = Soil SE = Sediment SO = Solid SI = Sludge W = Water O = Oil A = Air
Relinquished By	Date/Time	Received By	Date/Time	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By	Date/Time	Received By	Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By _____ Date/Time _____

PNNL JTAZ 60181
W05701
Jul 03 12'0

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.

W07-012-112

Page 1 of 1

Collector Fluor Hanford D.E. PARCHEN		Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. W07-012		Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title RCRA DECEMBER 2006		HNF - H - 506 - 4	Ice Chest No.	TJ - 2	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland		Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol RCRA		Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample No.	Lab ID	*	Date		

TNFTC

Relinquished By D. E. PARCHEN Print: <i>D.E. Parchen</i> Sign: <i>[Signature]</i>	Date/Time JAN 25 2007 1430	Received By Eric Darley Print: <i>Eric Darley</i> Sign: <i>[Signature]</i>	Date/Time JAN 25 2007 1430	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	S = Soil DS = Drum Solid SF = Sediment DL = Drum Liquid SO = Solid T = Tissue SI = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By _____ Date/Time _____

STL

STL

Sample Check-in List

Date/Time Received: 11/25/07 1450

Client: PNL

SDG #: W05101 NA SAF #: W07-012 NA

Work Order Number: JTA260181

Chain of Custody #: W07-012-53, 112, 113

Shipping Container ID:

Air Bill #

1. Custody Seals on shipping container intact? Yes No
2. Custody Seals dated and signed? Yes No
3. Chain of Custody record present? Yes No
4. Cooler temperature: NA S. Vermiculite/packing materials is NA Wet Dry
5. Number of samples in shipping container: 32 58
6. Sample holding times exceeded? Yes No
7. Samples have:
 tape
 custody seals
 hazard labels
 appropriate samples labels
8. Samples are:
 in good condition
 broken
 leaking
 have air bubbles
 (Only for samples requiring head space)
9. Sample pH taken? pH<2 pH>2 pH>9
10. Sample Location, Sample Collector Listed? *
 *For documentation only. No corrective action needed. Yes No
11. Were any anomalies identified in sample receipt? Yes No
12. Description of anomalies (include sample numbers). Yes No

Sample Custodian:

EnDaly

Date: 11/25/07 1450

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary, process as is.

Project Manager _____

LS-023 9/03, Rev 5

Date _____

PNNL JTAZ00174 W05101 Due 03-12-07		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # S07-010-251
				Page <u>1</u> of <u>1</u>
Collector D. R. BREWINGTON	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. S07-010	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV OCTOBER 2006	<i>HNF-N-506-1</i>	Ice Chest No.	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. Submit invoices & deliverables to DL Stewart, PNNL		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Print	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
BREWINGTON D.R. BREWINGTON JAN 26 2007				E. Dally Eric Dally 01-26-07				(01-30-07) 01-26-07
Relinquished By		Date/Time		Received By		Date/Time		S = Soil DS = Drum Solid
								SE = Sediment DL = Drum Liquid
Relinquished By		Date/Time		Received By		Date/Time		SO = Solid T = Tissue
								SL = Sludge WI = Wine
Relinquished By		Date/Time		Received By		Date/Time		W = Water L = Liquid
								O = Oil V = Vegetation
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		A = Air X = Other
								Date/Time



STL

Sample Check-in List

Date/Time Received: 1/26/07 1453
 Client: PNL SDG #: W05101 NA [] SAF #: S07-010 NA []
 Work Order Number: J7A300174 Chain of Custody #: S07-010-251
 Shipping Container ID: _____ Air Bill #: _____

1. Custody Seals on shipping container intact? NA [] Yes [] No []
2. Custody Seals dated and signed? NA [] Yes [] No []
3. Chain of Custody record present? NA [] Yes [] No []
4. Cooler temperature: _____ NA [] 5. Vermiculite/packing materials is NA [] Wet [] Dry []
5. Number of samples in shipping container: 1
6. Sample holding times exceeded? NA [] Yes [] No []
7. Samples have:
 _____ tape
 _____ custody seals hazard labels
 _____ appropriate samples labels
8. Samples are:
 _____ in good condition leaking
 _____ broken have air bubbles
 (Only for samples requiring head space)
9. Sample pH taken? NA [] pH<2 [] pH>2 [] pH>9 []
10. Sample Location, Sample Collector Listed? * Yes [] No []
*For documentation only. No corrective action needed.
11. Were any anomalies identified in sample receipt? Yes [] No []
12. Description of anomalies (include sample numbers). _____

Sample Custodian:

Eric Dark

Date:

1/26/07 1453

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on:

by

Person contacted

[] No action necessary; process as is.

Project Manager

Date

PNNL JTA 300180
W05101
due 03/12/07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
I07-009-69

Collector DOE Hanford RICHLAND	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. 107-009	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title 21JPL-LOI NOVEMBER 2006	4NF-N-506 - 1	Ice Chest No.	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

卷之三

Relinquished By R. BREWINGTON	Print <i>R. Brewington</i>	Sign <i>R. Brewington</i>	Date/Time JAN 26 2007	Received By Eve Derby	Print <i>Eve Derby</i>	Sign <i>Eve Derby</i>	Date/Time 01-26-07	Matrix *
Relinquished By			Date/Time	Received By			Date/Time	S = Soil DS = Drum Solid SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SI = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By			Date/Time	



STL

Sample Check-in List

Date/Time Received: 1/26/07 1453Client: PNL SDG #: W05101 NA() SAF #: I07-009 NA()Work Order Number: J7A300180 Chain of Custody #: I07-009-69

Shipping Container ID: _____ Air Bill #: _____

1. Custody Seals on shipping container intact? NA() Yes No
2. Custody Seals dated and signed? NA() Yes No
3. Chain of Custody record present? NA() Yes No
4. Cooler temperature: NA 5. Vermiculite/packing materials is NA Wet Dry
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 tape
 custody seals hazard labels
 appropriate samples labels
9. Samples are:
 in good condition
 broken leaking
 have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH<2 pH>2 pH>9
11. Sample Location, Sample Collector Listed? *
 *For documentation only. No corrective action needed. Yes No
12. Were any anomalies identified in sample receipt? Yes No
13. Description of anomalies (include sample numbers): _____

Sample Custodian:

Eva Party

Date:

1/26/07 1453

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary, process as is.

Project Manager _____ Date _____

2/9/2007 9:27:10 AM

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabAnalyDueDate: 03/09/2007 WDS101
Batch: 7031398 WATER pCi/L
SEQ Batch, Test: None

Sample Preparation/Analysis

Balance Id:1120482733

6D Pu PrpRC5016, SepRC5010(5039)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JM828-1-AD J7A230268-2-SAMP	200.60g,in 	PUTC10487 01/18/07,pd 08/04/06,r	200					
01/23/2007 12:56		AmtRec: 20ML,500ML,4XLP,3X4LP #Containers: 9					Scr: Alpha: 1.71E-03 uCi/Sa	Beta: -1.40E-03 uCi/Sa
2 JM828-1-AG-X J7A230268-2-DUP	200.60g,in 	PUTC10488 01/18/07,pd 08/04/06,r						
01/23/2007 12:56		AmtRec: 20ML,500ML,4XLP,3X4LP #Containers: 9					Scr: Alpha: 1.71E-03 uCi/Sa	Beta: -1.40E-03 uCi/Sa
3 JNNG2-1-AA-B J7A310000-398-BLK	200.80g,in 	PUTC10489 01/23/07,pd 08/04/06,r						
01/23/2007 12:56		AmtRec: #Containers: 1					Scr: Alpha:	Beta:
4 JNNG2-1-AC-C J7A310000-398-LCS	203.10g,in 	PUSG0900 01/18/07,pd 08/04/06,r	↓					
01/23/2007 12:56		AmtRec: #Containers: 1					Scr: Alpha:	Beta:

Comments: PH < 2.0 9/3/2007

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JM8281AD-SAMP Constituent List:

PU-238	RDL:1	pCi/L	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20
Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20						

JNNG21AA-BLK:

PU-238	RDL:1	pCi/L	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/L	LCL:	UCL:	RPD:
Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20						

JNNG21AC-LCS:

PU-239	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20	Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20
--------	-------	-------	--------	---------	--------	--------	------	-------	--------	---------	--------

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 4

Prep_SamplePrep v4.8.26

2/15/2007 10:48:14 AM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

Sample Preparation/Analysis

Balance Id:1120482733

AnalyDueDate: 03/09/2007

7Y Ulso PrpRC5016/5086, SepRC5067(5039)
SR Uranium-234,235,238 by Alpha Spec

Pipet #: _____

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7046186 WATER

pCi/L

PM, Quote: SA , 57671

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNCXW-2-AC J7A250121-1-SAMP			204.30g,in	204.30g	UUTC17031 02/12/07.pd 01/20/04,r	200				
01/24/2007 10:44			AmtRec: 20ML,2X500ML,LP	#Containers: 4					Scr: Alpha: -3.32E-05 uCi/Sa	Beta: 2.07E-04 uCi/Sa
2 JNCXW-2-AE-X J7A250121-1-DUP			199.10g,in	199.10g	UUTC17032 02/12/07.pd 01/20/04,r					
01/24/2007 10:44			AmtRec: 20ML,2X500ML,LP	#Containers: 4					Scr: Alpha: -3.32E-05 uCi/Sa	Beta: 2.07E-04 uCi/Sa
3 JPGFT-1-AA-B J7B150000-186-BLK			200.30g,in	200.30g	UUTC17033 02/12/07.pd 01/20/04,r					
01/24/2007 10:44			AmtRec:	#Containers: 1					Scr: Alpha:	Beta:
4 JPGFT-1-AC-C J7B150000-186-LCS			200.50g,in	200.50g	UISG1399 11/22/06.pd 01/20/04,r					
01/24/2007 10:44			AmtRec:	#Containers: 1					Scr: Alpha:	Beta:

Comments: JH 12-03-2007

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JNCXW2AC-SAMP Constituent List:

U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	U-234	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
U-235	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:	U-238	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:

JPGFT1AA-BLK:

U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	U-234	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
U-235	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:	U-238	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 4

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.26

2/13/2007 7:44:12 AM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AnalyDueDate: 03/09/2007

Sample Preparation/Analysis

Balance Id:1120482733

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
SI CLIENT: HANFORD

Pipet #: 235

Batch: 7031465 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ /APR

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNC0N-1-AC J7A250129-1-SAMP	200.60g,in			1.5	46.2	50	10A	1159	2/20/07-3	
01/24/2007 12:16	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9					Scr:	Alpha: 5.90E-04 uCi/Sa	Beta: 1.96E-03 uCi/Sa	
2 JNC0N-1-AH-X J7A250129-1-DUP	199.10g,in			50.3			10B			
01/24/2007 12:16	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9					Scr:	Alpha: 5.90E-04 uCi/Sa	Beta: 1.96E-03 uCi/Sa	
3 JNC02-1-AC J7A250129-2-SAMP	194.50g,in			46.4			10C			
01/24/2007 09:31	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9					Scr:	Alpha: 8.66E-04 uCi/Sa	Beta: -4.11E-05 uCi/Sa	
4 JNC09-1-AC J7A250129-3-SAMP	200.00g,in			321.8			10D			
01/24/2007 10:46	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9					Scr:	Alpha: -5.70E-04 uCi/Sa	Beta: 9.57E-04 uCi/Sa	
5 JNFRX-1-AA J7A260178-1-SAMP	111.40g,in			53.1	100		10A	1354	2/22/07 n	
01/25/2007 13:14	AmtRec: 20ML,LP	#Containers: 2					Scr:	Alpha: -1.87E-04 uCi/Sa	Beta: 1.86E-04 uCi/Sa	
6 JNKXW-1-AC J7A300174-1-SAMP	166.30g,in			47.6	50		10F	1159	2/23/07	
01/26/2007 12:55	AmtRec: 20ML,2XLP	#Containers: 3					Scr:	Alpha: 7.20E-06 uCi/Sa	Beta: 1.59E-04 uCi/Sa	
7 JNNQK-1-AA-B J7A310000-465-BLK	203.60g,in			0.5	100		10B	1354	2/22/07 n	
01/24/2007 12:16	AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

STL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.26

2/13/2007 7:44:17 AM

Sample Preparation/Analysis

Balance Id:1120482733

AnalyDueDate: 03/09/2007

AZ Gross Alpha PrpRC5014
 S7 Gross Alpha by GPC using Am-241 curve
 SI CLIENT: HANFORD

Pipet #: _____

Batch: 7031465

pCi/L

SEQ Batch, Test: None

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JNNQK-1-AC-C J7A310000-465-LCS	203.90g,in	ASD4120 01/18/07,rd 02/09/06,r	1.5 0.7 100	10C	1354	2/22/07 n				

01/24/2007 12:16

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments: JNFRX-SAMP "Comments. Aliquot reduced due to weight screen activity. JB 02/13/07"
 JNKXW-SAMP "Comments. Aliquot reduced due to weight screen activity. JB 02/13/07"

PA L2.0 9b 2-13-07

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JNC0N1AC-SAMP Constituent List:

ALPHA RDL:3 pCi/L LCL: UCL: RPD:

JNNQK1AA-BLK:

ALPHA RDL:3 pCi/L LCL: UCL: RPD:

JNNQK1AC-LCS:

Am-241 RDL: pCi/L LCL:70 UCL:130 RPD:20

JNCON1AC-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JNNQK1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JNNQK1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____

Date: _____

STL Richland
 Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
 pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 8

Prep_SamplePrep v4.8.26

STL RICHLAND
2/23/2007 10:48:15 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National LabBC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
SI CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 03/09/2007

Sep1 DT/Tm Tech:

Batch: 7053500 WATER

pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ / APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNC0N-2-AD J7A250129-1-SAMP	202.60g,in 	1.5 68.4 100 					X4	1500	2/26/07	
01/24/2007 12:16	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9					Scr:	Alpha: 5.90E-04 uCi/Sa	Beta: 1.96E-03 uCi/Sa	
2 JNC02-2-AD J7A250129-2-SAMP	200.30g,in 			58.3			X6B			
01/24/2007 09:31	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9					Scr:	Alpha: 8.66E-04 uCi/Sa	Beta: -4.11E-05 uCi/Sa	
3 JNC09-2-AD J7A250129-3-SAMP	201.70g,in 			55.8			X6C			
01/24/2007 10:46	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9					Scr:	Alpha: -5.70E-04 uCi/Sa	Beta: 9.57E-04 uCi/Sa	
4 JNFRX-2-AC J7A260178-1-SAMP	152.60g,in 			96.7			X6D			
01/25/2007 13:14	AmtRec: 20ML,LP	#Containers: 2					Scr:	Alpha: -1.87E-04 uCi/Sa	Beta: 1.86E-04 uCi/Sa	
5 JNFTQ-2-AA J7A260181-1-SAMP	153.20g,in 			97.6			X7A			
01/25/2007 12:05	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr:	Alpha: 5.77E-04 uCi/Sa	Beta: 3.41E-04 uCi/Sa	
6 JNFTQ-2-AJ-X J7A260181-1-DUP	155.10g,in 			95.6			X7B			
01/25/2007 12:05	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr:	Alpha: 5.77E-04 uCi/Sa	Beta: 3.41E-04 uCi/Sa	
7 JNFTQ-2-AA J7A260181-2-SAMP	153.60g,in 			90.6			X7C			
01/25/2007 12:05	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr:	Alpha: -1.52E-03 uCi/Sa	Beta: 4.10E-04 uCi/Sa	

STL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep_SamplePrep v4.8.26

2/23/2007 10:48:17 AM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AnalyDueDate: 03/09/2007

Sample Preparation/Analysis

Balance Id:1120482733

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: _____

Batch: 7053500 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JNKXW-2-AD	197.10g,in									
J7A300174-1-SAMP										
01/26/2007 12:55	AmtRec: 20ML,2XLP	#Containers: 3							Scr: Alpha: 7.20E-06 uCi/Sa	Beta: 1.59E-04 uCi/Sa
9 JPXHP-1-AA-B	199.30g,in									
J7B220000-500-BLK										
01/24/2007 12:16	AmtRec:	#Containers: 1							Scr: Alpha:	Beta:
10 JPXHP-1-AC-C	201.00g,in	BESB3010								
J7B220000-500-LCS		01/23/07,pd 08/08/06,r								
01/24/2007 12:16	AmtRec:	#Containers: 1							Scr: Alpha:	Beta:

Comments: JNFRX-SAMP "Comments. Aliquot reduced due to weight screen activity. JB 02/23/07"

JNFTQ-SAMP "Aliquot reduced due to weight screen activity. JB 02/23/07"

JNFTO-SAMP "Aliquot reduced due to weight screen activity. JB 02/23/07"

JNKXW-SAMP "Aliquot reduced due to weight screen activity. JB 02/23/07"

RH 42.0 2-23-07

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JNC0N2AD-SAMP Constituent List:

BETA RDL:4 pCi/L LCL: UCL: RPD:

JPXHP1AA-BLK:

BETA RDL:4 pCi/L LCL: UCL: RPD:

JPXHP1AC-LCS:

Sr-90 RDL: pCi/L LCL:70 UCL:130 RPD:20

JNC0N2AD-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JPXHP1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 10

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.26

2/23/2007 10:48:18 AM

Sample Preparation/Analysis

Balance Id:1120482733

AnalyDueDate: 03/09/2007

Batch: 7053500 pCi/L
SEQ Batch, Test: NoneBC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
SI CLIENT: HANFORD

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ



Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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JPXHP1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

2/9/2007 10:25:26 AM

STL RICHLAND

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AnalyDueDate: 03/09/2007

Batch: 7031458 WATER

pCi/L

Sample Preparation/Analysis

Balance Id:1120482733

Pipet #:

DRM

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

2/12/07 2:40 PM

Sep2 DT/Tm Tech:

2/13/07 7:48:59 AM

Prep Tech: ,BockJ

DRM

PM, Quote: SA , 57671

SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On / Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JM828-1-AE J7A230268-2-SAMP	1005.40g,in	SRTB14473 01/24/07,pd 09/11/06,r	1.802 3.033	1"	22.5	+0000	2-9-01	3"	0926	9/14/06	
		YTA16972 Ex.1/3/2006		0.8862					32	0744	9/3/06
									32	0834	9/20/06
01/23/2007 12:56	AmtRec: 20ML,500ML,4XLP,3X4LP	#Containers: 9									
2 JNC0N-1-AG J7A250129-1-SAMP	1005.80g,in	SRTB14477 02/06/07,pd 09/11/06,r	1.594 2.0008	23,3				5"	1003	2/14/07 r	
		YTA1693 Ex.1/3/2006		0.7992					33	0744	9/3/06
									33	0834	9/20/06
01/24/2007 12:16	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9									
3 JNC02-1-AG J7A250129-2-SAMP	1001.90g,in	SRTB14478 02/06/07,pd 09/11/06,r	1.907 1.9853	20,7				3"	1003	2/14/07 r	
		YTA16974 Ex.1/3/2006		0.8598					32	0744	9/3/06
									32	0834	9/20/06
01/24/2007 09:31	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9									
4 JNC09-1-AG J7A250129-3-SAMP	1001.30g,in	SRTB14479 02/06/07,pd 09/11/06,r	1.683 2.0086	23,0				9"	1038	2/14/07 r	
		YTA16975 Ex.1/3/2006		0.8180					32	0744	9/3/06
									32	0834	9/20/06
01/24/2007 10:46	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9									

STL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 4

Prep_SamplePrep v4.8.26

2/9/2007 10:25:28 AM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AnalyDueDate: 03/09/2007

Batch: 7031458 WATER

pCi/L

SEQ Batch, Test: None

Sample Preparation/Analysis

Balance Id:1120482733

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
51 CLIENT: HANFORD

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
5 JNC24-1-AC J7A250138-2-SAMP	995.20g,in	SRTB14480 02/06/07,pd 09/11/06,r	1.049 2.0086 0.8857	1"	23.9	100	3"	1039	2/14/07 R		
01/24/2007 09:56	AmtRec: 20ML,3XLP,4LP	#Containers: 5									
6 JNC24-1-AD-X J7A250138-2-DUP	1001.50g,in	SRTB14481 02/06/07,pd 09/11/06,r	1.687 1.9969 0.8898	24.2			9"	1112	2/14/07 R		
01/24/2007 09:56	AmtRec: 20ML,3XLP,4LP	#Containers: 5									
7 JNNP5-1-AA-B J7A310000-458-BLK	1000.40g,in	SRTB14482 02/06/07,pd 09/11/06,r	1.689 2.0280 0.8328	23.9			3"	1112	2/14/07 R		
01/24/2007 09:56	AmtRec:	#Containers: 1									
8 JNNP5-1-AC-C J7A310000-458-LCS	1000.30g,in	srg1314 02/06/07,pd 09/11/06,r	1.502 1.9928 0.7537	23.7	↓		9"	1145	2/14/07 R		
01/24/2007 09:56	AmtRec:	#Containers: 1									

STL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 8

Prep_SamplePrep v4.8.26

2/9/2007 10:25:31 AM

STL RICHLAND

Sample Preparation/Analysis

Balance Id:1120482733

CL Sr-90 Prp/SepRC5006(5071)
 TL Sr-85 by Nal and Sr-90 by GPC 7 day ingrowth
 5! CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 03/09/2007

Sep1 DT/Tm Tech:

Batch: 7031458
 SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments: PH < 2.0 9/2-4-07

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JM8281AE-SAMP Constituent List:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20
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JNNP51AA-BLK:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:
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JNNP51AC-LCS:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20
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JM8281AE-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
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JNNP51AA-BLK:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
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JNNP51AC-LCS:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
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Approved By _____

Date: _____

PGW WATER

2/9/2007 11:00:34 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 03/09/2007 WOS101

Batch: 7031455 WATER pCi/L
SEQ Batch, Test: NoneAW Gamma PrpRC5017
TA Gamma by HPGE
SI CLIENT: HANFORD

Pipet #: _____

PM, Quote: SA , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ / APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JM828-1-AA J7A230268-2-SAMP	2000.30g,in			100 ml	100	64	0657	0657		
01/23/2007 12:56	AmtRec: 20ML,500ML,4XLP,3X4LP	#Containers: 9							Scr: Alpha: 1.71E-03 uCi/Sa	Beta: -1.40E-03 uCi/Sa
2 JNC0N-1-AE J7A250129-1-SAMP	1999.70g,in					6	0648			
01/24/2007 12:16	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9							Scr: Alpha: 5.90E-04 uCi/Sa	Beta: 1.96E-03 uCi/Sa
3 JNC02-1-AE J7A250129-2-SAMP	2000.00g,in					66	0652			
01/24/2007 09:31	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9							Scr: Alpha: 8.66E-04 uCi/Sa	Beta: -4.11E-05 uCi/Sa
4 JNC09-1-AE J7A250129-3-SAMP	2002.50g,in					67	0652			
01/24/2007 10:46	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9							Scr: Alpha: -5.70E-04 uCi/Sa	Beta: 9.57E-04 uCi/Sa
5 JNC24-1-AA J7A250138-2-SAMP	2001.00g,in					68	0652			
01/24/2007 09:56	AmtRec: 20ML,3XLP,4LP	#Containers: 5							Scr: Alpha: 1.14E-03 uCi/Sa	Beta: -3.47E-04 uCi/Sa
6 JNFTQ-1-AC J7A260181-1-SAMP	1970.80g,in					64	0837	0837		
01/25/2007 12:05	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5							Scr: Alpha: 5.77E-04 uCi/Sa	Beta: 3.41E-04 uCi/Sa
7 JNFTQ-1-AH-X J7A260181-1-DUP	2007.50g,in					65	0834			
01/25/2007 12:05	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5							Scr: Alpha: 5.77E-04 uCi/Sa	Beta: 3.41E-04 uCi/Sa

2/9/2007 11:00:37 AM
 384868, Pacific Northwest National Laboratory ,
 Pacific Northwest National Lab
AnalyDueDate: 03/09/2007
Batch: 7031455 **WATER** pCi/L
 SEQ Batch, Test: None

Sample Preparation/Analysis

Balance Id:1120482733

AW Gamma PrpRC5017
 TA Gamma by HPGE
 51 CLIENT: HANFORD

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JNFT0-1-AC		2002.60g,in			100 ~ 100	66	JB37	2/28/07		
J7A260181-2-SAMP										
01/25/2007 12:05			AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr: Alpha: -1.52E-03 uCi/Sa	Beta: 4.10E-04 uCi/Sa
9 JNNPX-1-AA-B		2000.10g,in								
J7A310000-455-BLK									67 0X38	
01/25/2007 12:05			AmtRec:	#Containers: 1					Scr: Alpha:	Beta:
10 JNNPX-1-AC-C		2002.60g,in	qcag1332							
J7A310000-455-LCS			01/23/07, pd 03/07/05,r						68 0X3Y	
01/25/2007 12:05			AmtRec:	#Containers: 1					Scr: Alpha:	Beta:

Comments: RH < 2.0 JB2-9-01

All Clients for Batch:
 384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

IM8281AA-SAMP Constituent List:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

JNNPX1AA-BLK:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

JNNPX1AC-LCS:

Cs-137	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
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STL Richland
 Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
 pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 10

Prep_SamplePrep v4.8.26

2/22/2007 5:44:45 PM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab
AnalyDueDate: 03/09/2007

Sample Preparation/Analysis

Balance Id:1120482733

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ManisD,BockJ

Batch: 7031450	WATER	pCi/L	PM, Quote: SA , 57671							
Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JM828-1-AC J7A230268-2-SAMP	3892.80g,in		ITA6024 01/17/07	IFA	38.2	100	L2	1939	2/22/07 040	
01/23/2007 12:56		AmtRec: 20ML,500ML,4XLP,3X4LP	#Containers: 9							
2 JM83H-1-AA J7A230278-1-SAMP	3907.20g,in		ITA6025 01/17/07	IFA	37.3	100	L4	1943		
01/23/2007 12:31		AmtRec: 20ML,2X4LP	#Containers: 3							
3 JNC0N-1-AF J7A250129-1-SAMP	3937.50g,in		ITA6026 01/17/07	IFA	37.1	100	L5	1944		
01/24/2007 12:16		AmtRec: 20ML,5XLP,3X4LP	#Containers: 9							
4 JNC02-1-AF J7A250129-2-SAMP	3897.00g,in		ITA6027 01/17/07	IFA	34.1	100	L2	2140		
01/24/2007 09:31		AmtRec: 20ML,5XLP,3X4LP	#Containers: 9							
5 JNC09-1-AF J7A250129-3-SAMP	3937.00g,in		ITA6028 01/17/07	IFA	36.1	100	L4	2143		
01/24/2007 10:46		AmtRec: 20ML,5XLP,3X4LP	#Containers: 9							
6 JNC7W-1-AA J7A250163-1-SAMP	3817.20g,in		ITA6029 01/17/07	IFA	36.9	100	L5	2144		
01/24/2007 12:30		AmtRec: 20ML,2X4LP	#Containers: 3							
7 JNFMN-1-AA J7A260157-1-SAMP	3974.80g,in		ITA6030 01/17/07	IFA	34.8	100	L2	2333		
01/25/2007 13:14		AmtRec: 20ML,2X4LP	#Containers: 3							

STL Richland
Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep_SamplePrep v4.8.26

2/22/2007 5:44:46 PM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

Sample Preparation/Analysis

Balance Id:1120482733

AnalyDueDate: 03/09/2007

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
SI CLIENT: HANFORD

Pipet #: _____

Batch: 7031450 WATER
SEQ Batch, Test: None

pCi/L

PM, Quote: SA , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JNK0D-1-AA J7A300180-1-SAMP	3919.40g,in		ITA6031 01/17/07	IFA	36.4	100	L4	2338	2/22/07010	
01/26/2007 09:01		AmtRec: 20ML,500MLP,2X4LP	#Containers: 4				Scr:	Alpha: 2.19E-03 uCi/Sa	Beta: -1.37E-03 uCi/Sa	
9 JNK0D-1-AE-X J7A300180-1-DUP	3922.00g,in		ITA6032 01/17/07	IFA	36.5	100	L5	2338		
01/26/2007 09:01		AmtRec: 20ML,500MLP,2X4LP	#Containers: 4				Scr:	Alpha: 2.19E-03 uCi/Sa	Beta: -1.37E-03 uCi/Sa	
10 JNNPC-1-AA-B J7A310000-450-BLK	3975.90g,in		ITA6033 01/17/07	IFA	36.9	100	L4	0648	2/23/075	
01/26/2007 09:01		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	
11 JNNPC-1-AC-C J7A310000-450-LCS	3951.30g,in		ISD0728 12/20/06	IFA	38.2	100	L5	0649		
01/26/2007 09:01		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	

Comments: JM828-SAMP "Comments: Samples JNC7W, JNK0D & JNK0D-Dup required filtering, soil present. DRM 2/22/07"

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JM8281AC-SAMP Constituent List:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
JNNPC1AA-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
JNNPC1AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

JM8281AC-SAMP Calc Info:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 11

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.26

2/9/2007 9:14:37 AM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AnalyDueDate: 03/09/2007 WO5101

Sample Preparation/Analysis

Balance Id:1120482733

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: BockJ

Batch: 7031399 WATER pCi/L
SEQ Batch, Test: None All Tests: 7031398 6DSO, 7031399 FPS5, 7031404 ARS6, 7031450 BNTB, 7031455 AWTA, 7031458 CLTL,

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JM824-1-AC J7A230268-1-SAMP			125.30g,in	125.30g		- 60				
01/23/2007 12:13			AmtRec: 20ML,500ML,LP	#Containers: 3					Scr: Alpha: -1.47E-04 uCi/Sa	Beta: 1.41E-05 uCi/Sa
2 JM828-1-AF J7A230268-2-SAMP			125.50g,in	125.50g						
01/23/2007 12:56			AmtRec: 20ML,500ML,4XLP,3X4LP	#Containers: 9					Scr: Alpha: 1.71E-03 uCi/Sa	Beta: -1.40E-03 uCi/Sa
3 JNCXW-1-AA J7A250121-1-SAMP			125.40g,in	125.40g						
01/24/2007 10:44			AmtRec: 20ML,2X500ML,LP	#Containers: 4					Scr: Alpha: -3.32E-05 uCi/Sa	Beta: 2.07E-04 uCi/Sa
4 JNC41-1-AA J7A250148-1-SAMP			126.40g,in	126.40g						
01/24/2007 10:26			AmtRec: 20ML,500MLP	#Containers: 2					Scr: Alpha: -5.38E-05 uCi/Sa	Beta: 1.05E-04 uCi/Sa
5 JNC41-1-AC-X J7A250148-1-DUP			125.30g,in	125.30g						
01/24/2007 10:26			AmtRec: 20ML,500MLP	#Containers: 2					Scr: Alpha: -5.38E-05 uCi/Sa	Beta: 1.05E-04 uCi/Sa
6 JNFTQ-1-AD J7A260181-1-SAMP			125.80g,in	125.80g						
01/25/2007 12:05			AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr: Alpha: 5.77E-04 uCi/Sa	Beta: 3.41E-04 uCi/Sa
7 JNFTQ-1-AD J7A260181-2-SAMP			125.70g,in	125.70g		✓				
01/25/2007 12:05			AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr: Alpha: -1.52E-03 uCi/Sa	Beta: 4.10E-04 uCi/Sa

STL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep_SamplePrep v4.8.26

2/12/2007 9:08:16 AM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AnalyDueDate: 03/09/2007

Batch: 7031399 WATER
SEQ Batch, Test: None

Sample Preparation/Analysis

Balance Id:1120482733

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
SI CLIENT: HANFORD

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JNK0D-1-AC J7A300180-1-SAMP			125.70g,in	125.70g						
01/26/2007 09:01			AmtRec: 20ML,500MLP,2X4LP	#Containers: 4					Scr: Alpha: 2.19E-03 uCi/Sa	Beta: -1.37E-03 uCi/Sa
9 JNK0D-1-AD-S J7A300180-1-MS			125.90g,in	125.90g	TCSG1767 01/03/07,pd 01/10/06,r					
01/26/2007 09:01			AmtRec: 20ML,500MLP,2X4LP	#Containers: 4					Scr: Alpha: 2.19E-03 uCi/Sa	Beta: -1.37E-03 uCi/Sa
10 JNNG5-1-AA-B J7A310000-399-BLK			126.60g,in	126.60g						
01/26/2007 09:01			AmtRec:	#Containers: 1					Scr: Alpha:	Beta:
11 JNNG5-1-AC-C J7A310000-399-LCS			125.10g,in	125.10g	TCSE2068 01/24/07,pd 01/10/06,r					
01/26/2007 09:01			AmtRec:	#Containers: 1					Scr: Alpha:	Beta:
12 JNNG5-1-AD-BN J7A310000-399-IBLK										
01/26/2007 09:01			AmtRec:	#Containers: 1					Scr: Alpha:	Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JM8241AC-SAMP Constituent List:

Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 12

ICOC v4.8.26

2/9/2007 9:14:48 AM

STL RICHLAND

Sample Preparation/Analysis

Balance Id:

Pipet #:

AnalyDueDate: 03/09/2007

Sep1 DT/Tm Tech:

Batch: 7031399
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments: RA L 2-0 93 2-9-07

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JM8241AC-SAMP Constituent List:

Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

JNKOD1AD-MS:

JNNG51AA-BLK:

Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JNNG51AC-LCS:

Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

JNNG51AD-IBLK:

Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JNNG51AE-IBLK:

Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JM8241AC-SAMP Calc Info:

Uncert Level (#s):: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JNKOD1AD-MS:

Uncert Level (#s):: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JNNG51AA-BLK:

Uncert Level (#s):: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JNNG51AC-LCS:

Uncert Level (#s):: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JNNG51AD-IBLK:

Uncert Level (#s):: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JNNG51AE-IBLK:

Uncert Level (#s):: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____

Date: _____

STL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 13

Prep_SamplePrep v4.8.26

S 1/31/2007 1:34:24 PM

LT 384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

RICHLAND AnalyDueDate: 03/09/2007

Batch: 7031404 WATER SEO Batch, Test: None

Sample Preparation/Analysis

Balance Id: 12445

Pipet #: _____

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
SI CLIENT: HANFORD

Sep1 DT/Tm Tech: 29-07pm

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JM824-1-AA J7A230268-1-SAMP 								
01/23/2007 12:13	AmtRec: 20ML,500MLP,LP	#Containers: 3					Scr: _____	Alpha: _____
2 JNC0N-1-AA J7A250129-1-SAMP 								Beta: _____
01/24/2007 12:16	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9					Scr: _____	Alpha: _____
3 JNC02-1-AA J7A250129-2-SAMP 								Beta: _____
01/24/2007 09:31	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9					Scr: _____	Alpha: _____
4 JNC09-1-AA J7A250129-3-SAMP 								Beta: _____
01/24/2007 10:46	AmtRec: 20ML,5XLP,3X4LP	#Containers: 9					Scr: _____	Alpha: _____
5 JNKXW-1-AA J7A300174-1-SAMP 								Beta: _____
01/26/2007 12:55	AmtRec: 20ML,2XLP	#Containers: 3					Scr: _____	Alpha: _____
6 JNKXW-1-AE-X J7A300174-1-DUP 								Beta: _____
01/26/2007 12:55	AmtRec: 20ML,2XLP	#Containers: 3					Scr: _____	Alpha: _____
7 JNNHL-1-AA-B J7A310000-404-BLK 								Beta: _____
01/26/2007 12:55	AmtRec: _____	#Containers: 1					Scr: _____	Alpha: _____
								Beta: _____

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
 Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7

ICO v4.8.26

1/31/2007 1:34:27 PM

STL RICHLAND

Sample Preparation/Analysis

Balance Id:

12445

Pipet #:

J-9-07nm

AnalyDueDate: 03/09/2007

Batch: 7031404

SEQ Batch, Test: None

AR H-3 Prp/SepRC5007
 S6 Tritium by Liquid Scint
 5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

pCi/L



Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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8 JNNHL-1-AC-C

J7A310000-404-LCS

01/26/2007 12:55

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

9 JNNHL-1-AD-BX

J7A310000-404-MBLK

01/26/2007 12:55

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

10 JNNHL-1-AE-CM

J7A310000-404-MLCS

01/26/2007 12:55

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

11 JNNHL-1-AF-BN

J7A310000-404-IBLK

01/26/2007 12:55

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JM8241AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JNNHL1AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JNNHL1AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JNNHL1AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 11

STL Richland

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ICOC v4.8.26

2/14/2007 10:16:28 AM

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 03/09/2007 WOS101

Batch: 7031396 WATER ug/L
SEQ Batch, Test: None

Sample Preparation/Analysis

Balance Id:1120482733

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
SI CLIENT: HANFORD

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNCXW-1-AD J7A250121-1-SAMP	25.40g,in							
01/24/2007 10:44	AmtRec: 20ML,2X500ML,LP	#Containers: 4					Scr: Alpha: -3.32E-05 uCi/Sa	Beta: 2.07E-04 uCi/Sa
2 JNCX1-1-AA J7A250121-2-SAMP	25.10g,in							
01/24/2007 09:40	AmtRec: 20ML,500ML	#Containers: 2					Scr: Alpha: -5.01E-05 uCi/Sa	Beta: 9.88E-05 uCi/Sa
3 JNFTQ-1-AE J7A260181-1-SAMP	25.60g,in							
01/25/2007 12:05	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr: Alpha: 5.77E-04 uCi/Sa	Beta: 3.41E-04 uCi/Sa
4 JNFTQ-1-AF-S J7A260181-1-MS	25.30g,in	unsf3593 02/05/07,PD 01/23/07,r						
01/25/2007 12:05	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr: Alpha: 5.77E-04 uCi/Sa	Beta: 3.41E-04 uCi/Sa
5 JNFTQ-1-AG-X J7A260181-1-DUP	25.80g,in							
01/25/2007 12:05	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr: Alpha: 5.77E-04 uCi/Sa	Beta: 3.41E-04 uCi/Sa
6 JNFTQ-1-AE J7A260181-2-SAMP	26.10g,in							
01/25/2007 12:05	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr: Alpha: -1.52E-03 uCi/Sa	Beta: 4.10E-04 uCi/Sa
7 JNNGR-1-AA-B J7A310000-396-BLK	25.10g,in							
01/25/2007 12:05	AmtRec:	#Containers: 1					Scr: Alpha:	Beta:

STL Richland
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep_SamplePrep v4.8.26

2/14/2007 10:16:34 AM

STL RICHLAND

Sample Preparation/Analysis

Balance Id:1120482733

DH UNat_Laser PrpRC5015
 SS Total Uranium by KPA
 51 CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 03/09/2007

Sep1 DT/Tm Tech:

Batch: 7031396

ug/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JNNGR-1-AC-C	25.00g,in	unsf3594						
J7A310000-396-LCS		02/05/07,pd						
		01/23/07,r						
01/25/2007 12:05	AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:	
9 JNNGR-1-AD-C	25.40g,in	unsc1490						
J7A310000-396-LCS		01/23/07,pd						
		04/28/06,r						
01/25/2007 12:05	AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:	
Comments: JNFT0-SAMP ""	<i>PH < 2.0 82-14-01</i>							
JNFT0-SAMP ""								

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JNCXW1AD-SAMP Constituent List:

Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:
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JNFTQ1AF-MS:

JNNGR1AA-BLK:

Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:
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JNNGR1AC-LCS:

Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20
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JNNGR1AD-LCS:

Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20
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JNCXW1AD-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
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JNFTQ1AF-MS:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
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JNNGR1AA-BLK:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
----------------------	------------------	--------------	-------------	---------

JNNGR1AC-LCS:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
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JNNGR1AD-LCS:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
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STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 2

ISV - Insufficient Volume for Analysis

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

WO Cnt: 9

Prep_SamplePrep v4.8.26

133

2/15/2007 9:44:58 AM

ICOC Fraction Transfer/Status Report

ByDate: 2/15/2006, 2/20/2007, Batch: '7031398', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
7031398					
AC		CalcC	BockJ	2/9/2007 9:21:17 AM	
SC			andersonp	IsBatched	1/31/2007 1:33:42 PM ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/9/2007 9:21:17 AM RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	2/9/2007 9:27:17 AM RICH-RC-5016 REVISION 6
SC			HarveyK	InSep1	2/9/2007 9:47:02 AM RICH-RC-5010 REV0
SC			HarveyK	Sep1C	2/14/2007 8:38:12 AM RICH-RC-5010 REV4
SC			FABREM	Sep2C	2/14/2007 2:47:43 PM RICH-RC-5039 REV 5
SC			StringerR	InCnt1	2/14/2007 2:58:20 PM RICH-RD-0008 REVISION 4
SC			DAWKINSO	CalcC	2/14/2007 7:47:17 PM RICH-RD-0008 REVISION 4
AC			BockJ		2/9/2007 9:27:17 AM
AC			HarveyK		2/9/2007 9:47:02 AM
AC			HarveyK		2/14/2007 8:38:12
AC			FABREM		2/14/2007 2:47:43 PM
AC			StringerR		2/14/2007 2:58:20 PM
AC			DAWKINSO		2/14/2007 7:47:17 PM

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCPFractions v4.8.26

STL RICHLAND

134

2/21/2007 2:47:06 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/21/2006, 2/26/2007, Batch: '7046186', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7046186						
AC	CalcC	BockJ	2/15/2007 10:43:10			
SC		andersonp	IsBatched	2/15/2007 9:15:18 AM		ICOC_RADCALC v4.8.26 rich-rc-5017 rEVISION 5
SC		BockJ	InPrep	2/15/2007 10:43:10 AM		RICH-RC-5016 REVISION 6
SC		BockJ	Prep1C	2/15/2007 10:48:22 AM		RICH-RC-5086 REV2
SC		HarveyK	InPrep2	2/16/2007 9:58:11 AM		RICH-RC-5086 REV2
SC		HarveyK	Prep2C	2/16/2007 9:58:26 AM		RICH-RC-5067 REV6
SC		HarveyK	InSep1	2/16/2007 9:58:40 AM		RICH-RC-5067 REV6
SC		HarveyK	Sep1C	2/19/2007 9:18:41 AM		RICH-RC-5039 REV 5
SC		FABREM	Sep2C	2/20/2007 4:08:30 PM		RICH-RD-0008 REVISION 4
SC		DAWKINSO	InCnt1	2/20/2007 5:35:21 PM		RICH-RD-0008 REVISION 4
SC		DAWKINSO	CalcC	2/20/2007 10:14:23 PM		RICH-RD-0008 REVISION 4
AC		BockJ	2/15/2007 10:48:22			
AC		HarveyK	2/16/2007 9:58:11			
AC		HarveyK	2/16/2007 9:58:26			
AC		HarveyK	2/16/2007 9:58:40			
AC		HarveyK	2/19/2007 9:18:41			
AC		FABREM	2/20/2007 4:08:30 PM			
AC		DAWKINSO	2/20/2007 5:35:21 PM			
AC		DAWKINSO	2/20/2007 10:14:23			

AC: Accepting Entity, SC: Status Change

STL Richland

Richland Wa.

STL RICHLAND

Page 1

Grp Rec Cnt:9
ICOFCfractions v4.8.26

135

2/22/2007 3:22:33 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/22/2006, 2/27/2007, Batch: '7031465', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
7031465					
AC		CalcC	BockJ	2/13/2007 7:38:56	
SC			andersonp	IsBatched 1/31/2007 1:39:36 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep 2/13/2007 7:38:56 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C 2/13/2007 7:44:28 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2 2/21/2007 10:45:46 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	Prep2C 2/22/2007 10:33:12 AM	RICH-RC-5014 REVISION 6
SC			BlackCL	InCnt1 2/22/2007 10:50:15 AM	RICH-RD-0003 REVISION 4
SC			StringerR	CalcC 2/22/2007 2:07:49 PM	RICH-RD-0003 REVISION 4
AC			BockJ	2/13/2007 7:44:28	
AC			AshworthA	2/21/2007 10:45:46	
AC			AshworthA	2/22/2007 10:33:12	
AC			BlackCL	2/22/2007 10:50:15	
AC			StringerR	2/22/2007 2:07:49 PM	

AC: Accepting Entry; SC: Status Change

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2/27/2007 10:53:19 AM

ICOC Fraction Transfer/Status Report

ByDate: 2/27/2006, 3/4/2007, Batch: '7053500', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
7053500					
AC		CalcC	BockJ	2/23/2007 10:32:19	
SC			antonsonl	IsBatched	2/22/2007 3:01:05 PM ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/23/2007 10:32:19 AM RICH-RC-5017 Revision 5
SC			BockJ	Prep1C	2/23/2007 10:48:20 AM RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	2/23/2007 12:04:39 PM RICH-RC-5014 REVISION 6
SC			AshworthA	Prep2C	2/26/2007 12:53:33 PM RICH-RC-5014 REVISION 6
SC			BlackCL	InCnt1	2/26/2007 1:07:02 PM RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	2/26/2007 8:11:26 PM RICH-RD-0003 REVISION 4
AC			BockJ		2/23/2007 10:48:20
AC			AshworthA		2/23/2007 12:04:39
AC			AshworthA		2/26/2007 12:53:33
AC			BlackCL		2/26/2007 1:07:02 PM
AC			DAWKINSO		2/26/2007 8:11:26 PM

AC: Accepting Entry, SC: Status Change

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2/27/2007 12:39:05 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/27/2006, 3/4/2007, Batch: '7031458', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
	7031458				
AC		CalcC	BockJ	2/9/2007 9:47:46 AM	
SC			andersonp	IsBatched	1/31/2007 1:37:47 PM ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/9/2007 9:47:46 AM RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	2/9/2007 10:26:15 AM RICH-RC-5016 REVISION 6
SC			ManisD	InSep1	2/12/2007 8:28:10 AM RICH-RC-5006 REV 6
SC			ManisD	Sep1C	2/13/2007 3:16:24 PM RICH-RC-5006 REV 6
SC			DAWKINSO	InCnt1	2/13/2007 4:36:49 PM RICH-RD-0007 REVISION 5
SC			StringerR	Cnt1C	2/14/2007 11:23:53 AM RICH-RD-0007 REVISION 5
SC			ManisD	Sep2C	2/20/2007 1:45:00 PM RICH-RC-5071 REV 4
SC			BlackCL	InCnt1	2/20/2007 1:46:14 PM RICH-RD-0003 REVISION 4
SC			StringerR	CalcC	2/22/2007 9:19:24 AM RICH-RD-0003 REVISION 4
AC			BockJ		2/9/2007 10:26:15
AC			ManisD		2/12/2007 8:28:10
AC			ManisD		2/13/2007 3:16:24 PM
AC			DAWKINSO		2/13/2007 4:36:49 PM
AC			StringerR		2/14/2007 11:23:53
AC			ManisD		2/20/2007 1:45:00 PM
AC			BlackCL		2/20/2007 1:46:14 PM
AC			StringerR		2/22/2007 9:19:24

AC: Accepting Entry; SC: Status Change

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2/22/2007 2:26:03 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/22/2006, 2/27/2007, Batch: '7031455', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
7031455					
AC		CalcC	BockJ	2/9/2007 10:44:37	
SC			andersonp	IsBatched	1/31/2007 1:37:47 PM ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/9/2007 10:44:37 AM RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	2/9/2007 11:00:40 AM RICH-RC-5017 REVISION 5
SC			AshworthA	InPrep2	2/20/2007 11:18:43 AM RICH-RC-5017 REVISION 4
SC			AshworthA	Prep2C	2/21/2007 6:42:05 PM RICH-RC-5017 REVISION 4
SC			DAWKINSO	InCnt1	2/21/2007 8:40:36 PM RICH-RD-0007 REVISION 5
SC			StringerR	CalcC	2/22/2007 9:19:18 AM RICH-RD-0007 REVISION 5
AC			BockJ		2/9/2007 11:00:40
AC			AshworthA		2/20/2007 11:18:43
AC			AshworthA		2/21/2007 6:42:05 PM
AC			DAWKINSO		2/21/2007 8:40:36 PM
AC			StringerR		2/22/2007 9:19:18

AC: Accepting Entry; SC: Status Change

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2/23/2007 9:47:59 AM

ICOC Fraction Transfer/Status Report

ByDate: 2/23/2006, 2/28/2007, Batch: '7031450', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
7031450					
AC		CalcC	BockJ	2/20/2007 9:22:18	
SC			andersonp	IsBatched	1/31/2007 1:37:46 PM ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/20/2007 9:22:18 AM RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	2/20/2007 10:18:54 AM RICH-RC-5017 REVISION 5
SC			ManisD	InSep1	2/21/2007 1:53:58 PM RICH-RC-5025 REV 3
SC			BostedD	Sep1C	2/22/2007 5:45:19 PM RICHRC5025 REV3
SC			ManisD	Sep1C	2/22/2007 5:46:06 PM RICHRC5025 REV3
SC			DAWKINSO	InCnt1	2/22/2007 6:01:11 PM RICH-RD-0007 REVISION 5
SC			StringerR	CalcC	2/23/2007 8:38:56 AM RICH-RD-0007 REVISION 5
AC			BockJ		2/20/2007 10:18:54
AC			BostedD		2/22/2007 5:45:19 PM
AC			ManisD		2/22/2007 5:46:06 PM
AC			DAWKINSO		2/22/2007 6:01:11 PM
AC			StringerR		2/23/2007 8:38:56

AC: Accepting Entry; SC: Status Change

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ICOCPfractions v4.8.26

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2/14/2007 3:47:29 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/14/2006, 2/19/2007, Batch: '7031399', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
7031399					
AC		CalcC	BockJ	2/9/2007 9:05:40 AM	
SC			andersonp	IsBatched	1/31/2007 1:33:42 PM ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/9/2007 9:05:40 AM RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	2/9/2007 9:14:48 AM RICH-RC-5016 REVISION 6
SC			HarveyK	InSep1	2/12/2007 8:45:26 AM RICH-RC-5065 REV5
SC			HarveyK	Sep1C	2/12/2007 4:02:28 PM RICH-RC-5065 REV5
SC			DAWKINSO	InCnt1	2/12/2007 5:07:28 PM RICH-RD-0001 REVISION 3
SC			BlackCL	CalcC	2/13/2007 1:31:26 PM RICH-RD-0001 REVISION 3
AC			BockJ		2/9/2007 9:14:48 AM
AC			HarveyK		2/12/2007 8:45:26
AC			HarveyK		2/12/2007 4:02:28 PM
AC			DAWKINSO		2/12/2007 5:07:28 PM
AC			BlackCL		2/13/2007 1:31:26 PM

AC: Accepting Entry; SC: Status Change

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ICOFCFractions v4.8.26

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2/12/2007 2:29:05 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/12/2006, 2/17/2007, Batch: '7031404', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
	7031404						
AC		CalcC	McDowellID	2/8/2007 4:14:22 PM			
SC			andersonp	IsBatched	1/31/2007 1:33:42 PM		ICOC_RADCALC v4.8.26
SC			McDowellID	InSep1	2/8/2007 4:14:22 PM		RICH-RC-5007 REVISION 6
SC			McDowellID	Sep1C	2/9/2007 2:31:49 PM		RICH-RC-5007 REVISION 6
SC			StringerR	InCnt1	2/9/2007 2:43:06 PM		RICH-RD-0001 REVISION 3
SC			BlackCL	CalcC	2/12/2007 7:31:31 AM		RICH-RD-0001 REVISION 3
AC			McDowellID	2/9/2007 2:31:49 PM			
AC			StringerR	2/9/2007 2:43:06 PM			
AC			BlackCL	2/12/2007 7:31:31			

AC: Accepting Entry; SC: Status Change

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ICOCPfractions v4.8.26

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2/28/2007 4:33:23 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/28/2006, 3/5/2007, Batch: '7031396', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
7031396					
AC		Cnt1C	BockJ	2/14/2007 9:17:34	
SC			andersonp	IsBatched	1/31/2007 1:33:42 PM ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/14/2007 9:17:34 AM RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	2/14/2007 10:19:29 AM RICH-RC-5015 REVISION 4
SC			AshworthA	InPrep2	2/23/2007 7:01:16 AM RICH-RC-5015 REVISION 4
SC			AntonsonL	InPrep2	2/23/2007 7:01:34 AM RICH-RC-5015 REVISION 4
SC			AshworthA	Prep2C	2/26/2007 6:44:25 PM RICH-RC-5015 REVISION 4
SC			NelsonT	Cnt1C	2/28/2007 2:55:05 PM RICH-RC-5058 REV 7
AC			BockJ		2/14/2007 10:19:29
AC			AshworthA		2/23/2007 7:01:16
AC			AntonsonL		2/23/2007 7:01:34
AC			AshworthA		2/26/2007 6:44:25 PM
AC			NelsonT		2/28/2007 2:55:05 PM

AC: Accepting Entry, SC: Status Change

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